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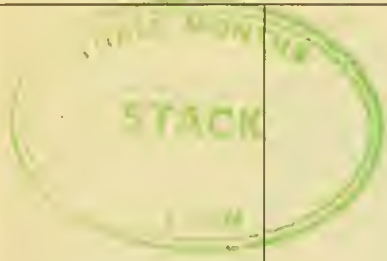
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NEWCASTLE INFIRMARY.







Sir Walter Blackett, Bart., M.P.

From a Painting by Sir Joshua Reynolds, P.R.A.

THE
HISTORY
OF THE
NEWCASTLE INFIRMARY.

BY
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MEDICINE

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CONTENTS.

	PAGE.
INTRODUCTION	vii
CHAPTER I.	
The Founding of the Infirmary	1
CHAPTER II.	
The Infirmary in the Eighteenth Century	13
CHAPTER III.	
Reconstruction in 1801	28
CHAPTER IV.	
The Period 1801-1850	40
CHAPTER V.	
The Dobson Wing	51
CHAPTER VI.	
Introduction of Antiseptic System. Ravensworth Wards ...	72
CHAPTER VII.	
The Royal Infirmary	88
CHAPTER VIII.	
The Infirmary as a School of Practical Medicine and Surgery	98
CHAPTER IX.	
Closing years of the old Infirmary. The Royal Victoria Infirmary	107
APPENDICES	125



LIST OF ILLUSTRATIONS.

	PAGE.
Sir Walter Blackett, Bart., M.P.	<i>Frontispiece.</i>
Plan of Newcastle and Gateshead, 1788	8
The Infirmary, 1753	14
Joseph Butler, Lord Bishop of Durham	17
Martin Benson, Lord Bishop of Gloucester	18
Basement Storey of Infirmary New Wards and proposed Fever House, 1801	34
The Infirmary, 1801	36
The Infirmary, 1830	42
Wm. Ingham	44
Shute Barrington, Lord Bishop of Durham	48
The Infirmary, showing original building with addition, 1801-1803	54
The Infirmary, with addition of Dobson Wing	54
Algernon, Fourth Duke of Northumberland	59
Robert Stephenson	60
Peregrine George Ellison	71
The Ravensworth Wards	80
J. Collingwood Bruce	96
Thomas Emerson Headlam	98
Sir John Fife	100
Dennis Embleton	102
Edward Charlton	104
George Yeoman Heath	106

	PAGE.
The Board Room	108
The Library	108
The Percy Ward	110
Operating Theatre	110
The Royal Victoria Infirmary, 1906	112
The Royal Victoria Infirmary—Plan of Ground Floor	120
The Royal Victoria Infirmary—Administrative Buildings	122
The Royal Victoria Infirmary—Out-patients' Buildings	122
The Royal Victoria Infirmary—Plan of lower Ground Floor	124
Amateur Concert in aid of the Newcastle Infirmary	134

INTRODUCTION.

The intention to write a short history of the Infirmary at Newcastle arose out of a search, which grew in interest as it proceeded, among the early records of the Institution. The object of the search was at first only the satisfaction of a desire to become acquainted with the founders of the Infirmary, and more especially with its first physicians and surgeons. The study of these records was also suggested by the early approach of the time when the Infirmary should quit its present abode, and when that abode, which the demands on the Institution had outgrown, should disappear from its place.

As this enquiry advanced, and included a survey of the work of the hospital and of the problems that had arisen in the course of its history, the time seemed appropriate for giving shape to its results. And it was not unnatural that the ambition to tell the story should be indulged by one in whom the attachment of a long service had implanted a feeling of affectionate veneration for both the Institution and its abode.

The history of the Infirmary which has been produced, seeks to be regarded as no more than a sketch.

But it may be claimed that both the writing of it, and the gathering of material in preparation, have been actuated by a definite purpose. It has been an object to bring out the historical interest of an institution which began a century and a half ago. From this point of view, its beginning and its progress in the eighteenth century form the stages in its history which will most appeal to the reader. The foundation of the Infirmary as one of a group of hospitals, which were built within a brief series of years, is referred to in the text. The statement may be amplified by a further reference to the philanthropic movement of which the building of these hospitals was the outcome. It is no new observation that this up-welling of philanthropy was the characteristic of a period which was equally marked by the decline of dogmatic religion. And yet it is no less true that this fresh springing up of human sympathy had its main source in the religious spirit; and that the early promoters of these institutions had in view not only the bodily welfare but also the moral improvement of the objects of their charity. The point is illustrated in the early reports and appeals of the Newcastle Infirmary, as well as of kindred institutions. Another feature of the period, to which reference is made in the text, but which may be here amplified, was the acknowledged distance that separated the classes of the people. The well-to-do classes who supported a charity were frankly spoken of as *superiors*, the objects of the charity

as *inferiors*. Both this concern for the moral improvement of the patients, and the social attitude referred to, are expressed in an extract from a report in the County Hospital at Winchester (quoted in Rickman Gray's *History of English Philanthropy*). It is there set forth that "we can never hope to secure their Affections, and soften their Passions, reform their Manners and possess them with a sense of their duty to God and their Superiors so effectually as in the hospital during their time of ill-health and weakness." A similar combination of sentiments is indicated in a rule of the Newcastle Infirmary, which remained nominally in force till in the course of years and the press of work a daily was substituted for a weekly admission and discharge of patients. The rule, framed with less than the usual perspicuity of the period (1801) ordered "That when patients are discharged cured, they shall be strictly enjoined by the Chairman of the Committee, to return thanks to Almighty God in their respective places of worship and to the subscribers who recommended them."

A statement with regard to the Newcastle Infirmary which occurs in the following pages with possibly wearisome reiteration, refers to the overcrowding that has never been absent save for the briefest intervals. This overcrowding was permitted in nearly all the hospitals in the Kingdom, especially in the eighteenth century. A medical writer, Dr. Aiken, whose *Thoughts on*

Hospitals were much quoted in contemporary reports, describes the patients as being kept in rooms just large enough to hold their beds, and states with indignation that such "Crowding is necessary for the economical plan." No wonder that another writer on hospitals, Dr. Percival, states "It is a melancholy consideration that these charitable institutions, which are intended for the health and preservation of mankind, may too often be ranked amongst the causes of sickness and mortality." Or that the modern writer already quoted, summing up the results of the hospital movement of the eighteenth century, should account the arousing of attention to the necessity of cleanliness, public and personal, as its most valuable outcome, and should judge the discovery of whitewash to be the most hopeful fact in the philanthropic history of the century.

The crowding of the Newcastle Infirmary did not cease with the eighteenth century; it is doubtful if it will cease with the twentieth. The disastrous consequences, which it produced in former times, are no longer to be feared; but it is no easier now than then to keep hospital provision abreast even of the normal growth of population. The old Infirmary about to give place to the new, provided in its earliest days one hundred beds for a population in Newcastle of at most twenty-five thousand. A city with a population now grown more than tenfold can scarcely be over provided with a hospital, which has undergone no more than a

fourfold increase. It is possible that before another generation has passed, history, with regard to this question, may repeat itself.

The old Infirmary hands on to the new, also, the never absent financial problem. None of the old aspects of the problem are wanting; the question of devoting any portion of bequests and legacies to immediate use is still open for discussion, though throughout the history of the Infirmary necessity has stepped in to supply an answer. The problem of the future will be the fuller recognition of the principle of self-help among those who immediately benefit from the Infirmary, and the reconciling of this new principle with the older methods of charity. The need for charitable giving will exist in greater measure than in the past; and the two principles can only be brought into effective co-operation in the acknowledgment, among all classes of the community, of their practical interest in the Infirmary, and their obligation towards its support.

I have gratefully to acknowledge my indebtedness to the House Committee for their kindness in entrusting to me their Minute Books, and for giving me permission to make the fullest use of the information they contain. The old Minute Books of the eighteenth and early part of the nineteenth centuries have been an interesting study. They have, to some extent, like the diary of an individual, the quality of self-revelation; though the

regret has been constant during their perusal that the self-revelation was not found more ample and complete.

My thanks are due also to the publishers, Messrs. Andrew Reid & Co., for the great interest they have taken in the production of the work, for the generous labour and cost they have bestowed on the illustrations, and for the self-denying terms of their undertaking, in the interests of the Infirmary.

I have also to thank the President and Council of the College of Medicine for their kind permission to reproduce the fine portrait of Dr. Heath in their possession; Mr. James Acworth Angus for the loan of portraits of Dr. Headlam and Sir John Fife; Dr. C. M. Hope for the use of photographs; and Dr. W. D. Arnison for assistance in the obtaining of information on certain points in the history.

G. H. H.

July, 1906.

THE HISTORY

OF THE

NEWCASTLE INFIRMARY.

CHAPTER I.

THE FOUNDING OF THE INFIRMARY.

When the Infirmary at Newcastle was founded, England was well on the road of industrial progress. The long peace and Walpole's administration of affairs had favoured the interests of commerce, and population and wealth were rapidly increasing. The development of philanthropy was equally a characteristic of the period, more especially of that form of philanthropy which seeks to accomplish the work of charity by the association of numbers of small givers. The most familiar example of this associated philanthropy has been the building and maintenance of hospitals for the sick; and in the mid-eighteenth century, hospitals were being built throughout the kingdom. Of twenty provincial

*The
hospital
period.*

hospitals founded in the century, fifteen were built in the years from 1735 to 1775. The hospital at Bristol in the former year was the first provincial hospital in England; others followed, Addenbroke's and York in 1740, Northampton in 1743, Liverpool in 1745, Worcester in 1746, and Newcastle in 1751.

*Newcastle
in 1751.*

The population of Newcastle was then probably from twenty to twenty-five thousand. The town had shared in the general advance of the country in population and wealth. Its neighbouring coal-fields, its increasing general trade, its great waterway, were bringing about its development as a trading centre. But it still retained its character as a fortified town. Only six years before the building of the Infirmary, the walls had been put in a defensible condition, most of the gates built up, and heavy guns placed in position for the defence of the town against the Highland army of Prince Charles Edward. Throughout the winter of 1745-6, Newcastle became again the rendezvous of gathering armies, as it had been in the civil war and in the earlier days of the wars with Scotland. For some time an army of 20,000 troops was encamped on the Town Moor, and, especially as the actual danger of an attack soon passed away, the townspeople must have enjoyed the bustle attending the coming and going of great personages, and all the pomp and circumstance of war. With the welcome given to the victorious Duke of Cumberland as he

rested on his journey south from Culloden, the exciting incidents of the rebellion closed so far as concerned Newcastle. The town was free to return to its quiet ways and its increasing business, not again to be disturbed by the danger of hostile attack.

The inhabitants of Newcastle seem to have been ready for the suggestion that an infirmary should be built, for, when it came, it was acted on with great promptitude. The proposal is said to have arisen among the members of a social club, prominent among whom was a young surgeon of position in the town, Mr. Richard Lambert, who became one of the first surgeons to the new institution. The merit of the suggestion is usually ascribed to Mr. Lambert, but it was first brought before the public in a letter to the *Newcastle Courant* in January, 1751. This letter was signed B.K.,* and when the Infirmary was opened, one of the wards was named the B.K. Ward, in recognition of the good service done by this anonymous letter-writer. The letter contains so cogent a statement of the motives which actuated the builders of the Infirmary and so graphic a picture of contemporary Newcastle that, though of considerable length, it may still be read with interest.

*An
Infirmary
suggested.*

*B—K—'s
letter.*

* B.K. preserved his anonymity throughout. In the list of original Subscribers towards building the Infirmary, his contribution is entered as from "B.K., a person unknown by M. Bell, Esq., £20." It has been suggested that the letter emanated from the club on Mr. Lambert's suggestion. Mackenzie, *History*, vol. i., p. 375.

THE NEWCASTLE COURANT, from Saturday, December 29 to
Saturday, January 5, 1751.

To the Publisher of the NEWCASTLE COURANT.

Newcastle, Dec. 28, 1750.

SIR,

By giving the inclosed a Place in your next Paper, you'll very
much oblige

Your most humble Servant,

B— K—.

Non nobis solum nati sumus : impellimur

Natura, ut prodesse velimus quam plurimis.—CIC.

At a Time when so noble a Spirit of Charity is stirring among us, and, to the Honour of this Age and Nation, such great Encouragement is given to all charitable Foundations ; when we see particularly Hospitals for the Relief of the sick Poor, which, of all the various Kinds of publick Charity, deservedly claim the first Rank, erected in almost all the large Towns in this Kingdom : That no such Thing should ever be set on foot in this Town, is, I think, not a little strange and extraordinary. Certainly, if in any Place, London excepted, an Establishment of this Kind is necessary, it must be so here. For where are there so great Numbers of Poor employ'd, or their Employments more dangerous, than in and about this Neighbourhood ? Are there not in our Coal-works and other Manufactures, melancholy Accidents almost constantly happening ? The youngest of us must remember too many sad Instances, must have known of many of his poor Fellow Creatures, who have languish'd and died, only for want of, perhaps, a very little well applied Assistance, to have relieved their Wants, and again have rendered them useful Members of Society. 'Tis true, the worthy Magistrates of this Town have always allow'd 80*l.* per Ann. to four Surgeons to visit the Poor : something of this Kind is also done by the Coal Owners, and I believe by some other People : But these, though excellent Charities, can never be of that general Use. never do that Good an Hospital would ; for besides the Impossibility often of a regular Attendance in this Way, every Body knows, that the Diet, Lodging, and proper nursing the Patient, are, in most Cases more material than the Medicines prescribed. I may add to this, with what Difficulty is a Place got to put them in, when an Accident happens to a Person at a distance from home ?

This was the Case of that poor Woman, who had the Misfortune but the other Day to be run over by the Leeds Waggon, and who I

am told lay five or six Hours in an open Shop, in the utmost Misery and Anguish, before a Lodging could be found for her, or any Assistance given her.

Why then do not we follow the laudable Examples set us lately by Northampton, Worcester, Norwich, and other Places? What, have we less Sensibility of Heart than other People, less feeling for the Misfortunes of our Fellow Creatures? Let the very generous Collection made here on a late melancholy Occasion speak for us. Are we less able to bear the Expence of founding an Hospital? For Shame, let us never plead that Pretence. We can raise 200*l.* or 250*l.* per Year for Horse-racing, for a few Days senseless Diversion, and cannot raise double that sum for what will be of such Service to the Publick, do such Honour to Newcastle.

By what I can learn, and I have taken some Pains to be informed, 500*l.* per Year, after the first Expence of Building (if that be found necessary), and fitting up a House, will at least maintain 40 Patients, and certainly this is a Sum that may be rais'd without Difficulty, by Subscription, in Newcastle and the two adjacent Counties. But if we cannot bring this about at first, let us propose to receive only 20 Patients: I am solicitous, I must own, to have it begun at any Rate, as I am very confident that was it once begun, it would be carried on with as much Vigour as any Undertaking of this Kind ever was. The Corporation of Newcastle never used to be backward on such Occasions, and to imagine they would not in this do their Parts with their usual Generosity, would be an idle and a groundless Suspicion.

On a Subject like this, not to say too much is the most difficult Task, I flatter myself I have said enough to induce some or other to take this Matter into Consideration. A true benevolent Mind needs not Argument to excite him to Things of this Sort, and on him who finds nothing in his own Breast prompting him to them, neither Arguments nor Reasons will have any Weight; Hardness of Heart being always accompany'd with equal Stupidity of Head.

Here then I should have concluded, but that when any Scheme is propos'd, however for the publick Advantage, the World is too apt to ascribe it to some selfish End in the Proposer, I think it necessary to declare, that the Writer of this cannot possibly have any Motive of this kind, cannot reap any other Advantage by it, than the Pleasure it may perhaps give him, if it should take Effect, to have contributed in some Degree to the Welfare of that Society, of which Providence hath seen fit to make him a Member.

*The
temporary
Infirmary.*

But the zeal of the promoters of this benevolent scheme would not wait for the erection of a new building. A house was taken in the street, then, as now, called Gallowgate, in which to begin work at once, and this house was opened with all due ceremony on 23rd May, 1751. At the early hour of half-past nine, the subscribers or governors of the Infirmary about to be inaugurated assembled at the Exchange on the Sandhill and thence, accompanied by the Mayor and his "Brethren of the magistracy in their formalities," they proceeded to St. Nicholas' church to hear a sermon by Dr. Sharp, Archdeacon of Northumberland. As if to emphasize that their religious observances were free from taint of money-seeking, the advertisement intimating the arrangements for the day ended with the note, "There will be no collection." Then, at the close of the religious service, the Committee went to the Gallowgate house, and without loss of time began the work of the Infirmary, which has gone on without interruption since, by admitting seven in-patients and four out-patients. Very soon the house was found to afford too limited accommodation, and its twenty-three beds were supplemented during the summer by rooms hired in neighbouring houses. In this way, and by using the "unceiled garret" of the temporary Infirmary, accommodation was provided for from thirty-five to forty patients, until the opening of the new building. The medical staff at the opening in

Gallowgate consisted of four physicians and two surgeons. Their names are worth recording. The physicians were Drs. Askew, Cooper, Johnson and Lambert. The surgeons were Messrs. Samuel Hallowell and Richard Lambert. Mr. Joseph Airey was the first treasurer.

*The first
physicians
and
surgeons.*

At the first Quarterly Court in July, the Bishop of Durham (Dr. Butler) was nominated Grand Visitor and a President and Vice-Presidents were appointed. A Committee of thirty-six members was also nominated, twelve from each of the Counties of Durham, Newcastle-upon-Tyne and Northumberland. The Committee was to be re-elected at each Quarterly Court.

Meantime preparations were pushed forward for the erection of a permanent building and the efforts of the Committee were most liberally met. The Corporation gave a site on the Forth Banks and a donation of £100. At the same time, it must be recorded, they reduced the salary of the town surgeons from £80 to £40.

The subscriptions in a few months amounted to about £1,200.* There were also gifts in kind, the Company of Bricklayers making a contribution of 47,000 bricks. An inspector, or clerk of works, named Robert Newton, having been appointed at a wage of 2s. 6d. a day, he was ordered in the end of July "to set proper persons to work in order to cast the foundation of the intended

* For list of the original Subscribers of £10 and upwards towards the building of the Infirmary, see Appendix A.

*Laying
of the
foundation.*

buildings." On the 5th of September, 1751, the foundation stone was laid by Bishop Butler in the presence of the Mayor and Corporation and a distinguished company. On a plate of copper placed under the stone was engraved, "The Foundation of this Infirmary was laid on the 5th day of September, in the 25th year of the Reign of King George the second, 1751, by the Right Rev. Joseph, Lord Bishop of Durham, Grand Visitor." And on the reverse, "The ground was given by the Corporation of Newcastle, Ralph Sowerby, Esq., Mayor. William Clayton, Esq., Sheriff."

*Site of the
Infirmary.*

Before continuing the story of the building of the Infirmary, it may be of interest to fix the position of the site with reference to the topography at the time, and to compare it with the much-changed neighbourhood of to-day. It will be seen, on referring to the map, that within two or three hundred yards of the Forth Gate in the town wall was situated an enclosed recreation ground called the Forth Walk. This was an enclosure of about eleven acres, a very ancient possession of the town, planted and laid out with walks. It included among its attractions a bowling green, and on the northern side was a "house of entertainment" called the Forth House.* The site granted by the Corporation for the Infirmary was situated at the south-west corner

* The early Quarterly Courts and Meetings of the Building and Furnishing Committees were frequently held at the Forth House. Other places of meeting were the Merchants' Court, Bridge End Coffee House, and Katy's Coffee House.



A Plan of
NEWCASTLE
upon Tyne
and
GATESHEAD
1788.
Engraved by R. Bellby.



of the Forth. Across the lower portion of the ground, from north-west to south-east, ran the Skinnerburn in the dene which it had hollowed out for its channel. At the time the Infirmary was built, there do not appear to have been any houses between the Forth and Infirmary on the west, and the town wall to the east. At the foot of the Forth Banks, between Close Gate and the Skinnerburn, which was the boundary of the Corporation to the west, were a foundry and several nail factories; so that even then the neighbourhood was not free from smoke, which came to be complained of as a nuisance before the Infirmary had been long occupied. To the west lay the open fields; and the spectator from the Infirmary ground could command an uninterrupted view of Ravensworth, Whickham, and the entrance to the Derwent valley. To-day these open fields are busy streets; the Forth as a pleasure ground has long vanished and its area is occupied by the eastern portion of the Cattle Market, by the upper part of the Forth Banks, by Neville Street as far as St. Mary's Cathedral, and by the western portion of the Central Station and railway offices. The ground which stretched between the Infirmary site and the town wall is now covered by the Central Railway Station, and the line of the wall would be drawn in a plan across the station from Pink Lane to the eastern side of Orchard Street. Within comparatively recent years the foundations of the White Friars' Gate and

traces of the adjacent monastery were uncovered in the carrying out of some railway extensions; and the only fragment of the wall which the curious seeker now finds in the neighbourhood is a small portion embedded among warehouses to the east of Orchard Street. The Infirmary itself is the sole surviving reminiscence of the period of its foundation.

*Progress
of the
building.*

No charitable undertaking has ever been begun in Newcastle with greater enthusiasm than the building of the Infirmary, and once begun it proceeded without interruption and with reasonable rapidity. There were no strikes or trade disputes to interfere with progress as happens so frequently in these later days. Against another cause of delay in the completion of modern buildings the self-restraint of the builders of the Infirmary set an efficient guard. The plans, which had been first submitted for his approval to the Earl of Northumberland, lay for a short time open to the criticism and suggestion of those interested. But when once building had begun, and it was realized that the adoption of belated suggestions of change would seriously hinder progress, it was resolved by the Building Committee that "no alteration be made in the present plan except at a general or special court." In the autumn of 1752, a year from the laying of the foundation, the laying out of the ground was begun; a Furnishing Committee of seven was appointed; and also a committee of thirteen clergymen (there was clearly faith in

the good luck of odd numbers), to whom was entrusted the finishing and fitting up of the chapel. A report of the Building Committee in January, 1753, is interesting, as showing the stage then reached, and also as a record of kindly help in a temporary difficulty. The report says, "The house being now covered and the windows made, there are debts due for materials and workmanship amounting to near £300, and it is computed that £300 more will be necessary for such work as ought to be done before April, though there is no more than £59 7s. 0½d. in the Treasurer's hands." Mr. Matthew Bell's offer to "advance £200 until April next when the subscriptions will become due" provided the means of continuing the work. In the summer the house was nearing completion, and it was arranged that the anniversary feast,* for many years afterwards an important function, should be held in the great ward of the new Infirmary. Another festivity also took place in the building before it received the occupants for whom it was designed. The High Sheriff of Northumberland asked and obtained the use of the Infirmary for his public entertainment on Thursday the 23rd of August.

The Infirmary was opened on the 8th of October, 1753. The Matron had been busy removing the patients and goods from the Gallowgate house for ten days previously, and during that time it was "thought proper not to appoint any Visiting Clergyman or House

*Date of
opening.*

* For notes on the anniversary feast, see Appendix B.

Visitors.”* When the day of opening came, it was marked by no special public ceremony. Perhaps this unostentatious manner of inaugurating the new building may have been in part responsible for the curious error as to the date of the opening, which occurs in Brand’s *History*, and has been copied by all who have followed Brand.† The building is there said to have been opened for the reception of patients on the 8th of October, 1752; the minute books of the House and Building Committee show beyond question that the Infirmary was opened in 1753. In further proof of the accuracy of this date it is only necessary to cite the following facsimile reproduction of an advertisement in the *Newcastle Courant*, Saturday, October 6th, 1753:—

I N F I R M A R Y at N E W C A S T L E,

TIS with the greatest Pleasure that the COMMITTEE can now acquaint the Publick. that the NEW BUILDING on the Forth-banks is ready, and will be opened for the Reception of PATIENTS on Monday next, the eighth of October, at Ten o’Clock in the Forenoon.

At the same Time will be held there, a General Quarterly Court of the GOVERNORS of this Charity, to take the Reports of the several Committees, inspect the Accompts, appoint a new House Committee for the ensuing Quarter, and transact such other Business as shall be laid before them

By Order of the Committee. R. BURDUS, Secretary.

* Two Governors were appointed weekly as House Visitors, and the custom still continues. The following entry occurs in the Minute Book under date June 20th, 1751:—“That it is the opinion of this Committee that it would be highly proper that the House Visitors should attend the funerals of such patients as are to be buried from the Infirmary during the week of their attendance.”

† Brand, *History of Newcastle*, vol. i., p. 414.

CHAPTER II.

THE INFIRMARY IN THE EIGHTEENTH CENTURY.

The new Infirmary was a well-built edifice of stone ashlar work lined with brick—"Stone finishing" and "Plastering with sand and lime in imitation of stone work" were the general methods of interior decoration, and the windows were "provided with shutters (and not curtains) in the plainest manner." There was no needless ornamentation, even in the chapel. The committee of clergymen who took the chapel in hand had expressed the opinion "that if any sort of ornament were used in the ceilings of any other of the rooms, the Chapel should also be ornamented—if the other rooms were to be plain they chuse to have the Chapell plain." In the end the most absolute plainness was observed throughout. The general plan of the building, standing as it did in ample grounds, was more harmonious and dignified than it became in subsequent years, when increasing demands for space led to incongruous additions. The building formed two sides of a quadrangle, having a south and an east front. The south front consisted of three storeys and a base-

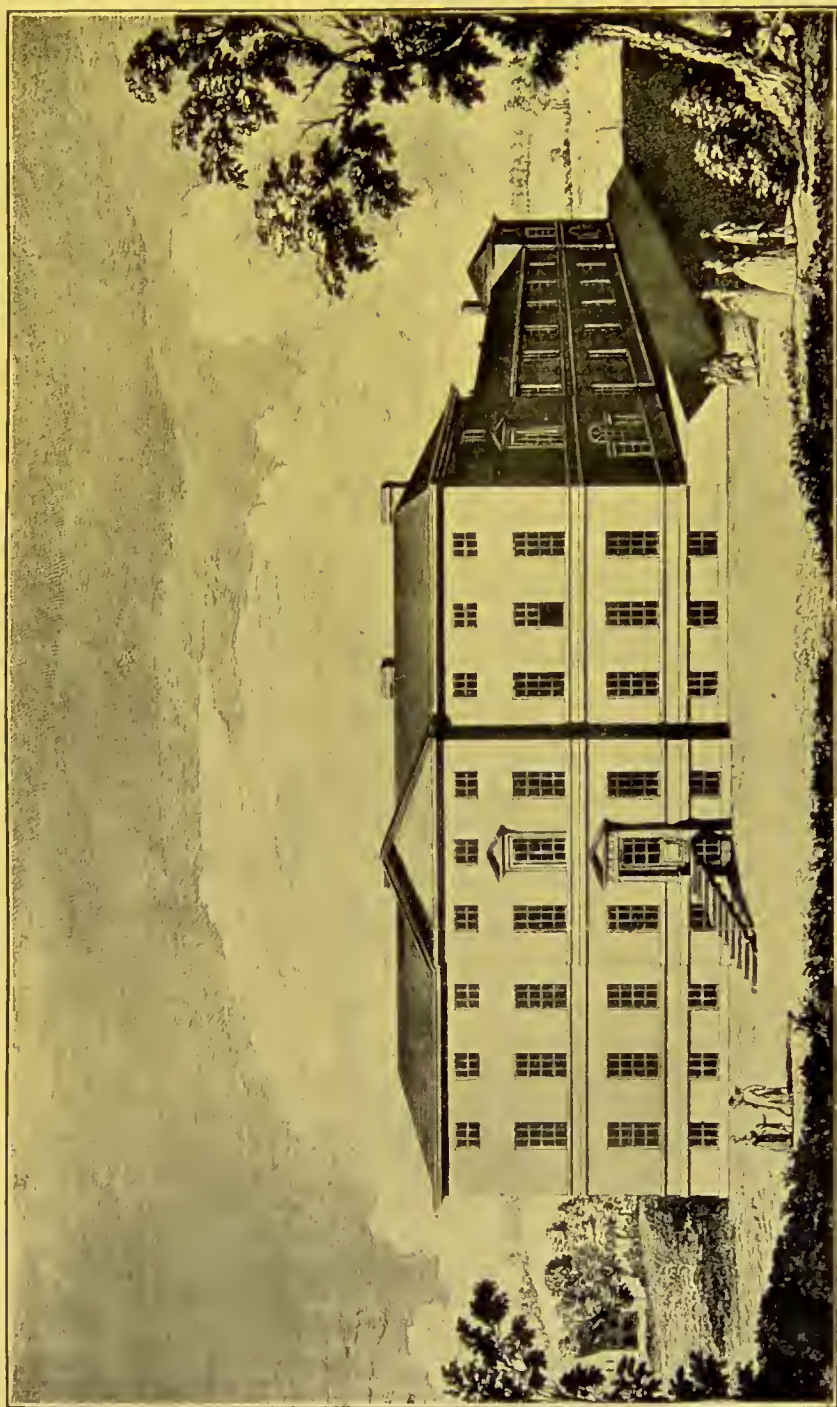
1753.

*Plan of
the
building.*

ment; the east front of two storeys only. In the first storey of the main building, or south front, were the chapel* and hall (or board room), which remain now as they were then, the physician's room, the surgery and the matron's parlour. The first storey of the east wing was occupied by two wards—a ward of sixteen beds for men, called the B.K., and a north ward of six beds for men, called the Job. Above these were three wards for women, the Butler, the Magdalen, and the Lazarette. In the second storey of the main building were three wards for men, the Durham, Newcastle and Northumberland. In addition to these were two back wards in the attic storey, called the Cheselden and Harvey, and a back room in the middle storey, called the Sydenham. The theatre was in the attic storey, as it remained until 1872. In all, the hospital contained ninety beds, and the accommodation remained without increase till the early years of the nineteenth century, though before long, statements were made about the house being full or overcrowded.

The cost. The total cost of the Infirmary, including the furniture required to supplement that which was moved from the Gallowgate house and lodgings, amounted to £3,697. The *Report* published by the Governors for their first year of work from April, 1751, to April, 1752,

* The chapel and burying-ground were consecrated by the Hon. and Right Reverend Dr. Richard Trevor, Bishop of Durham, on Oct. 18th, 1754.



The Infirmary, 1753.



is extant, and contains the following financial statement:—

Receipts.		Payments.
£2,643 1 2 $\frac{1}{4}$	Expenditure	£943 2 11 $\frac{1}{2}$
	Bank Annuities	1,245 5 8
	Balance in the hands of Mr.	
	Airey, Treasurer	454 12 7 $\frac{3}{4}$
		£2,643 1 3 $\frac{1}{4}$

Building Account.

Benefactions for Building.
£961 14 0

Payments for Building.
£1,125 7 6

N.B.—It is computed that the building (including baths and other necessary out-offices) when finished in a plain substantial manner will cost above Three Thousand Pounds.

Unfortunately the Reports for the subsequent years till 1774 have been lost, so that we have no detailed statement of the expenditure on the new building. The question had been early discussed of applying the surplus of the annual subscriptions to building, and the consideration of the question had been postponed. It does not again appear in the minute books, so that we are ignorant as to whether a separate building fund was maintained throughout. At any rate, at the conclusion of their building operations, the financial position of the Governors was a very good one. In the January following the opening, the Quarterly Court ordered that “£2,000 should be advanced to the town at 3 $\frac{1}{2}$ per cent.,” and for years the investments grew and there was always a balance in the hands of the Treasurer. But before long there must have been

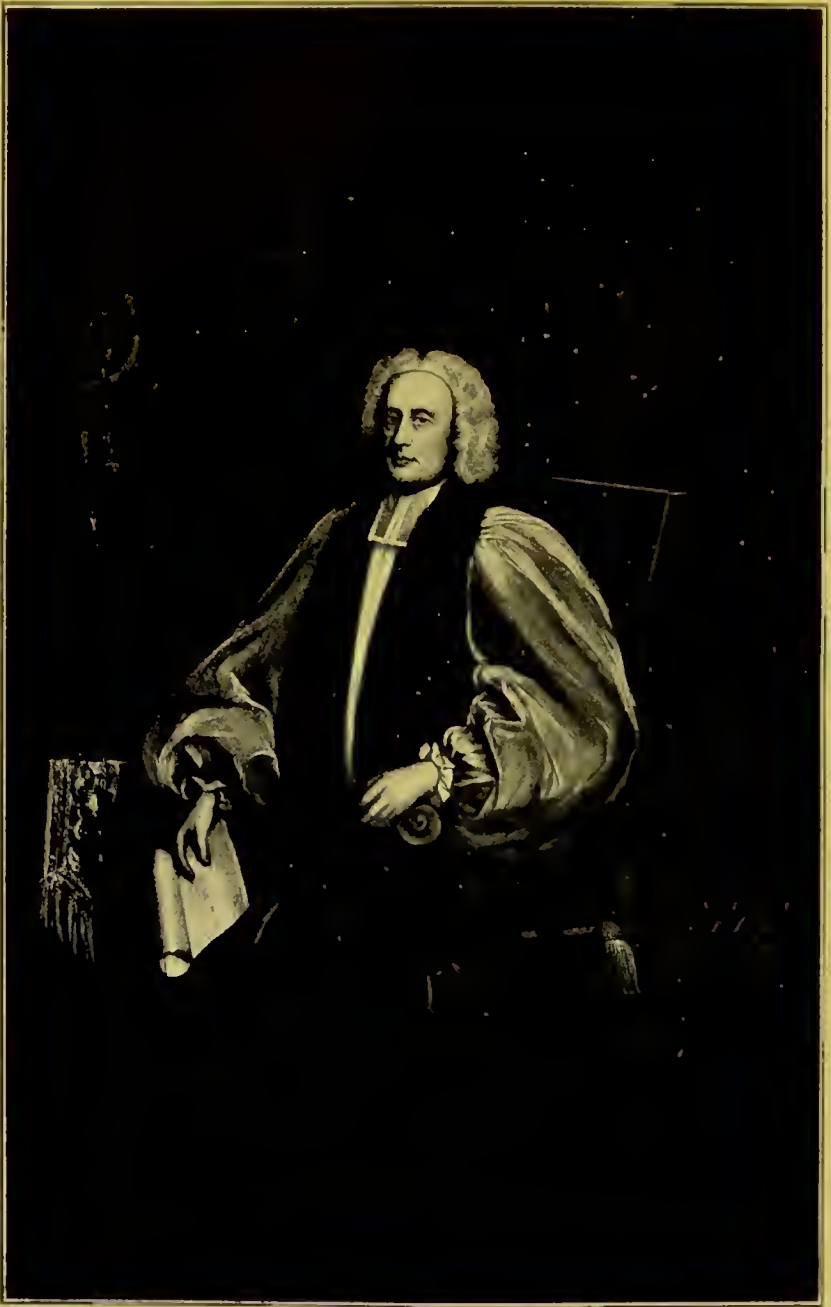
some cooling down of the zeal with which the first start was made. From 1756* onwards complaints are frequent as to the great arrears of the annual subscriptions, and various plans were adopted and appeals made to stimulate liberality. Some of these appeals were both adroitly and quaintly worded, but they needed frequent repetition. As the century advanced the difficulty increased; and the scarcity of money and high price of all provisions, throughout the long struggle with Napoleon, stinted still more the resources of the Infirmary.

*Early gifts
and benefac-
tions.*

At the commencement and in the earlier years of the Infirmary there were some gifts and benefactors of such interest as to claim special record. On the day of the laying of the foundation stone a sum of £42 was handed in as the proceeds of a course of lectures delivered in Hexham upon Experimental Philosophy. The lecturer and benefactor to that amount was Dr. John Rotherham, at that time practising in Hexham, but afterwards one of the physicians to the Infirmary.

* April 1, 1756. A resolution of the House Committee was passed calling a General Court to take measures with reference to arrears. It was stated that "many applications having been made and letters wrote to Subscribers in arrears and advertisements having been from time to time] inserted in the papers, and little notice having yet been taken of them"; the General Court was therefore recommended to issue a letter beginning: "At a General Court held this day, the Governors, observing that your subscription remains in arrears, occasioned, as they apprehend, by the neglect of the House Committee in not calling for it when it became due," and the Secretary was to be directed to wait with the Treasurer's receipt.





Joseph Butler, Lord Bishop of Durham.

From a Painting by Taylor.

He is remembered in local history as the author of a violent anti-Stuart pasquinade, found posted under the statue of Charles II., which had just then (1771) been removed from its old position at the end of the Tyne Bridge to the front of the Exchange. On the evening of the laying of the foundation a concert was held in the Assembly Rooms by Mr. Charles Avison, and the receipts, amounting to £36 15s., given in aid of the charity. Charles Avison was the organist of St. Nicholas' church, of much more than local reputation in his day as a composer and as the author of an "Essay upon Musical Expression." To readers of Browning, the name of Avison, long forgotten, is recalled by the poet as one of those with whom he holds his imaginary "Parleyings with certain people of importance in their day." For the service of the chapel Mrs. Whitfield gave a silver chalice; Mrs. Byne a silver flagon;* and Mrs. Hilton, by bequest which was carried out by Lady Musgrave, two silver patens. These pieces of plate, which are of great interest in themselves, remain the valued possessions of the Infirmary chapel. To the chapel also the Bishop of Durham (Dr. Butler) and the Bishop of Gloucester (Dr. Benson) were generous benefactors. Dr. Butler fitted up the room, in the Gallowgate house, which was used as a chapel, and presented for use in it an Oxford folio

* Mrs. Byne was the wife of the vicar of Ponteland and an ancestress of the Carr family.

Bible and Book of Common Prayer. These venerable volumes, in their original binding, are still in the chapel, though no longer in use. Towards building the Infirmary the Earl of Northumberland gave £200. The Bishop of Durham (Dr. Butler) became a subscriber of £100 for five years, and £50 to the building; and dying within a year (16th June, 1752) of laying the foundation stone, he left a legacy of £300 towards its completion. His lifelong friend, Dr. Martin Benson, Bishop of Gloucester, who had held one of the golden prebends of Durham, and whose interest Dr. Butler no doubt enlisted in the Infirmary being built in Newcastle, offered to the House Committee the choice of a donation of £100 or an annual subscription of £10 10s. The committee, like prudent men, chose the lump sum; and their prudence was justified when, a few months after the death of the Bishop of Durham, Dr. Benson followed him to the grave. There is something of unusual pathos in the death at so short an interval of these two great churchmen. In his last illness Dr. Butler had been moved first to Bristol, where he had been bishop before his translation to Durham, and then to Bath, and throughout his illness he was assiduously attended by Bishop Benson. The exhausting fatigue and anxiety of this attendance are said to have induced the illness from which Bishop Benson died on 30th August, 1752. By will he left a legacy to be used for finishing the chapel. The portraits of these



Martin Benson, Lord Bishop of Gloucester.

From a Painting by Taylor.

two prelates and benefactors to the Infirmary were presented to the Governors and are still in their possession. The history of the gift is contained in the following extract from the minutes of the Quarterly Court, dated July 3rd, 1753: "A letter from the Rev. Mr. Lloyd, Rector of Ryton, to the Secretary was read wherein he mentioned that he has sent to the Infirmary a present of the picture of the late pious, worthy and good Bishop of Gloucester (Dr. Benson) to be put into the committee room, with three guineas to buy a suitable frame; and that he is desired by Mr. Taylor who painted this picture to acquaint the Governors that he (Mr. Taylor) has a picture (of the same size) of the late Dr. Butler, Bishop of Durham, to present to the Infirmary as soon as the Room is dry enough for the Reception of it and begs to know when it would be proper to send it." The thanks of the court were given to Mr. Lloyd and Mr. Taylor, and the latter was "desired to send the late Bishop of Durham's picture as soon as he thinks proper." The portrait of Bishop Butler had been painted during his last illness and it was afterwards engraved by permission of the Governors for publication in the Oxford edition of Butler's works.

Another generous benefactor must be named, both for the liberality of his donations to the Infirmary and on account of the great place he filled in the life of Newcastle and Northumberland during the middle decades of the eighteenth century. His great wealth,

spent in open-handed charity and in profuse hospitality, his long public service as representative of the town in the House of Commons, made Sir Walter Blackett by far the most conspicuous personage of his own, or perhaps of any period in the history of Newcastle. His donation to the building fund of the Infirmary was £200; he was an annual subscriber of £50; and a few years after the Infirmary was completed (1758), he assigned the sum of £1,000, invested in the Ponteland Road Trust, to the charity, a portion of the interest accruing therefrom being given to the maintenance of religious services in the hospital. After Sir Walter Blackett's death in 1777, a full-length portrait of him by Sir Joshua Reynolds was presented to the Governors by Sir Walter's nephew and successor in the Wallington estate, Sir John Trevelyan. Eleven years later the permission of the Governors was obtained to have the portrait engraved for an intended history of Newcastle, and the result was the beautiful engraving which forms the frontispiece of the first volume of Brand's *History*. It is curious to note how little the picture seems to have been appreciated by the Governors. In acknowledging and accepting Sir John Trevelyan's gift, the name of the great master who had painted the portrait is not even mentioned. And when, later, Sir John himself applied to have the picture engraved, the House Committee in acceding to the request, ordered "that the several donations given by the late Sir W. Blackett

be delineated on the picture; also that Mr. Edwards be desired to add a little colour to the hand in the above picture." The only comment upon this striking order which is required is the information that the artist, who was thus commissioned to embellish Sir Joshua's work, had recently painted the first scenes for the new Theatre Royal at the corner of Drury Lane. The delineation ordered to be made upon the canvas remains legible, though happily indistinctly, to the present day.

The accommodation provided by the new building seems to have been fully occupied from the first. Year by year from five to six hundred patients were admitted and the numbers at any one time in the Infirmary varied from eighty to a hundred, sometimes exceeding that number. That the wards were constantly and dangerously overcrowded there can be no doubt. In 1767, for the first time, there appeared in the Newcastle papers an intimation which found frequent repetition in subsequent years. The Infirmary, it was intimated, was now quite full of patients; no more could be taken into the house, and contributors were asked to forbear recommending any in-patients for a fortnight to come. In the minute book for the same year there is a significant entry. It is in the form of a complaint (against whom does not appear) and has reference to a patient suffering from a contagious skin disease, for whom, on account of the crowded state of the wards, it was found impossible

*Overcrowding
of the
Infirmary.*

*Admission
of fever
cases.*

to provide a separate bed. As the years went on the difficulties were increased by the doubt which arose as to the admission of fever cases. Their admission long continued a matter of controversy, both inside and outside the faculty, as the medical profession was then usually styled. It was at length decided (1774) by the Governors that no fever cases should be admitted, but the controversy did not end there; it was only laid to rest by the establishment thirty years afterwards of a separate fever hospital. It is unfortunate that the Reports throughout the eighteenth century furnish no data by which the work done in the Infirmary may be judged. These Reports give only meagre figures of admission and discharge of patients, and of numbers cured or relieved. They contain no statement of the diseases treated, of operations performed, or their results; and the physicians and surgeons so far as can be ascertained issued no report of their own. There is abundant reason to think that the scourge of hospital disease in no long time overtook their work, and that its baneful presence led, in the last years of the eighteenth century, to those proposals of extension and improvement which were carried out in the early years of the next.

*Presence of
hospital
disease.*

*The medical
and surgical
staff.*

The staff, originally consisting of four physicians and two surgeons, was strengthened in 1760 by the appointment of two more surgeons. Henceforth the number was, and has continued, four of each. Among the

physicians and surgeons holding office in the first half-century of the Infirmary none are to us more than names. It is chiefly as bearing what we are used to call north-country names, that Askew and Cuthbert, Lambert and Pemberton among the physicians, and Keenleyside and Rayne and Abbs among the surgeons, catch the eye and remain in the memory more than others. Richard Lambert, the surgeon, has already been mentioned as first suggesting to his fellow townsmen the building of an Infirmary, and John Rotherham, the physician, as one of the first donors towards the carrying of it out. There seem to have existed at all times the best relations between the Governors and House Committee and the "gentlemen of the faculty." Among the latter themselves, so far as the minute books show, there arose but one point of controversy, and it illustrates the difference that then and long afterwards existed in the relative status of the physician and surgeon. In 1773 it was necessary to hold a special court of the Governors to consider a question upon which a small committee had obtained information from all the hospitals and infirmaries of the kingdom. The question was whether the surgeons should be allowed to prescribe internal medicines for their own patients. Their doing so was forbidden by rule, but it had become the custom to infringe the rule. A vote was therefore taken as between custom and rule, and the Governors decided by a majority of two in favour of continuing

*Question of
surgeons
prescribing.*

the custom. Though giving a scanty return to one in search of information as to the practice of medicine and surgery in the hospitals of the eighteenth century, the records of the Infirmary afford many a sidelight on matters of social interest. The attitude of the benefactors towards the objects of their charity, the condition and habits of the poor, the services expected from nurses and servants, and the remuneration given for these services are all points which find illustration in the pages of the minute books. Sometimes there is a gleam of unintentional humour in the record of proceedings, and sometimes, though very rarely, a passing reference to the great events that were happening in the world outside.* From the beginning it troubled the Governors, as it does their successors of to-day, that patients took the benefit of the charity who were well able to pay for their own cure. The idea of patients contributing had not then occurred to anyone, and when on one occasion a departing patient in gratitude offered a donation of £5 the gift was refused. We may judge, from the frequency with which it fell to the lot of the chairman of the week to reprimand delinquents, that the general standard of conduct among both patients and officials was not high. Disorderly, dirty and drunken

*The
Infirmary
minute
books.*

* Oct. 19, 1797. "The Matron informs the Committee that it was customary to illuminate the House upon particular occasions. Ordered: That she illuminate the House this night on account of the glorious victory obtained over the Dutch fleet by Admiral Duncan."

habits among the patients,* and more rarely similar offences on the part of servants, drew severe reprimands on the offenders. It was sometimes part of the punishment that the names of the delinquents and their offences should be posted up and read out in the wards. It was even threatened that on a repetition of the offence publication should be made in the newspapers, but it is probable that this part of the sentence was never carried out. Complaints from the patients as to food and drink were not infrequent, and the mode of dealing with such complaints illustrates the attitude referred to. One example will suffice. In May, 1754, a complaint as to the meat and beer was judged to be unfounded. The complaining patients were severely reprimanded, and ordered to have toast and water for a week. But at the same time the quantity of malt in the beer was ordered to be increased.

Allowing for the difference in the value of money, the rate of wages paid to nurses and servants seems to be extraordinarily low. The matron was paid £15 per annum. The nurses, in addition to their wages of £4 per annum, were to have a gratuity, contingent on a year's faithful service, not exceeding 40s. In 1754 it was resolved that "John Robertson, the Surgery man, be also employed as a House Steward, to take an

* September 9, 1756. "The patients admitted this day were called before the Committee and ordered to behave themselves decently during their stay in the House." Minute Book.

account of all things that come into the House, to call upon the subscribers for their subscriptions, and that his salary be £10 per annum and he be engaged to continue 3 years." The brewer's and labourer's wage was £7; the porter was paid eight guineas. A payment was at the outset of the Infirmary undertaken by the Committee which nowadays seems strange. Out-patients coming from a distance of ten miles and upwards were to be paid a shilling a week during their treatment towards defraying their expenses; and this was done "for the encouragement of remote subscribers as well as the greater benefit of the poor." It was the sprat to catch the herring.

When the Infirmary was founded, there had been little need to stimulate liberality. At the end of ten years the charity had an invested capital of £7,000, although even before that time the early zeal had begun to flag. As the century neared its close there were, however, better reasons than a loss of interest in the Infirmary for a falling off of its funds. War prices, and an income tax of ten per cent. can have left to most people but a small margin for charitable giving. In 1800, though the invested capital had not suffered diminution, the subscriptions had materially lessened, and there was a debt to the Treasurer on the year's accounts of £300. From the outbreak of the war in 1793, there are indications of the extent to which the work of the charity was crippled by the scarcity and

*Effect of the
war on the
Infirmary.*

high prices which soon followed. There were on different occasions complaints from the patients of a stinted allowance of bread. A letter from the Duke of Northumberland, which was read at a meeting of the Committee in July, 1795, is significant. His Grace forwarded a copy of a "recommendation from the Privy Council relative to the present scarcity of corn," and in consequence the Committee issued various directions restricting the use of bread and flour, and charging the nurses to take great care to prevent the bread being wasted or given away. The increased cost of maintenance led naturally to the admission of patients being restricted, and the number was reduced from ninety-two to eighty. This restriction was in itself by no means an evil. The wards had been persistently overcrowded, and overcrowding and unwholesomeness had produced the inevitable consequences. In spite of high prices and diminishing income, it was seen that not only a substantial addition, but something like a reconstruction of the existing building must be undertaken. We shall see in what spirit the Governors of the Infirmary faced their problem.

CHAPTER III.

RECONSTRUCTION IN 1801.

1801. When, at the end of the first fifty years of its existence, a proposal was made for the reconstruction and extension of the Infirmary, the time must have seemed to many ill-chosen. Such a proposal in the history of hospitals is seldom found to meet with unanimous approval; the time never seems to be precisely the appropriate one. But in 1801 the adverse critics had reasonable ground for their objections. The country was at war, prices were exorbitantly high, and it must have seemed only the counsel of prudence and common sense to wait till the return of peace. But in reality the general effect of the war had been to stimulate the industrial growth, which was in full progress before its outbreak; and Newcastle, as one of the centres which had most profited, was then on the flood-tide of prosperity. As the fruit of the great naval victories by which she had reduced to impotence the navies of Spain, Holland and France, England was now mistress of the seas; and she had gained a monopoly of the carrying trade of the world. Her manufacturing monopoly was

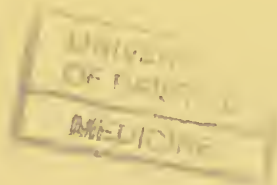
no less complete; and the landed interest, which was still the back-bone of the country, had full share of the rapidly accumulating wealth, for wheat had gone up to famine price, and rents were doubled. It was this new wealth, which the war up to this date had favoured rather than checked, that enabled the country to bear the load of taxation which the war entailed; and it was their share in the general prosperity which enabled the patrons of the Newcastle Infirmary to accept so readily the task of its reconstruction and enlargement.

A contemporary local historian has fortunately supplied us with a picture of the effect which increasing trade was having upon the town and district.* He enumerates, in the town and on the banks of the Tyne, seven foundries and iron works, in some of which, in anticipation of the modern Elswick, cannon and shot were cast for the Government and for exportation.† Other industries such as lead works, glass works, and potteries had long been located in and about Newcastle, but their number and output were increasing. As a result of all this business the town was undergoing change. The old walls were disappearing bit by bit. New residential quarters were springing up, and the

*Contemporary account
of Newcastle.*

* Baillie, *History of Newcastle*.

† Referring to Crowley's Iron and Steel Works in Swalwell, about four miles above Newcastle, Baillie says, "The time of war is the golden season to this opulent manufactory: and in no former war did the proprietors reap more advantage than in that now terminated." *History*, p. 504.



narrator gives a glowing account of the elegance and comfort of the houses that were being built.

But there was another side to the picture. The poor and the working-classes had but a scanty share in all this prosperity. No doubt work was abundant, but wages were kept down by the rapid increase of population that was taking place. This had been going on throughout the period of industrial expansion, and the rate of increase became so great that, between the beginning of the century and Waterloo, the population of the country rose from ten to thirteen millions. But the price of food was a more crushing evil for the poor than the growth of numbers. We have seen how the Committee of the Infirmary had been forced to restrict the allowance of bread to its inmates. It was an even more significant fact, mentioned by Baillie, that "during the late years of real, and not a little of artificial, scarcity," the proprietors of the largest iron works in the district "allowed their servants rye meal, flour, etc., at a very reduced price."* Clearly, the wage given was not a living wage, in the circumstances of the time, and had to be supplemented by what was tantamount to charity. As the rich grew richer, the poor grew poorer; and with poverty came suffering and disease, which made ever-increasing demands on the resources of the Infirmary.

* Baillie, *History*, p. 504.

The time was therefore in one sense opportune for an extension of the Infirmary. But it is evident from their plans that what the Governors had primarily in view was not so much an enlargement, which would enable them to admit a larger number of patients, as an extension and reconstruction, which would obviate the past overcrowding, and correct the sanitary defects of the old Building. In a Report issued to the public, the Infirmary is described as having all the faults of the older hospitals. Adopting the view then prevalent, that "the disposition of lodging rooms into long wards is the principal cause of bad air in hospitals, and of the want of success in treating the sick," the existing wards are said to be too large as well as overcrowded. The galleries are ill-adapted for ventilation; the sanitary arrangements antiquated and unwholesome; and a division of the inmates into medical and surgical, still more any classification according to the nature of the disease, impossible to be carried out. Against the wards in the south front of the Infirmary, a fault is alleged, which the modern dweller in Newcastle will scarcely hear of without a smile; they are alleged to suffer much in summer from the sun. Attention is drawn also to the absence of provision for the out-patients, and of consideration in the original construction of the building for the convenience of the physicians and surgeons in their work. There was only one small consulting room for the use of all the medical officers. To

*"Account of
the origin
and present
state of
Infirmary."*

remedy these many defects, it was proposed to convert the long wards, in the ground floor of the east wing, into physicians' and surgeons' consulting rooms, a waiting hall for the patients, and a dispensary. The remaining wards of the old building were to be divided up into rooms for not more than seven beds each. In this way accommodation would be left for only fifty patients, and the hospital would be brought up to its original number by the provision of from thirty to forty beds in the new building. This new building would not be constructed as a west wing, in correspondence with the already existing east wing; but, for the better access of air, the quadrangular form would be avoided, and the extension placed in direct line with the south front. To avoid the inconvenience resulting from the sun in summer, the wards would be given a northern aspect, and the gallery or corridor would interpose between them and the sun. Then follows a provision, which soon became the subject of wordy and bitter strife. "To the west end of the new building it is proposed to annex two wards with six bedsteads each, and two wards with two bedsteads each, together with a kitchen and wash house, for infectious fevers of accidental occurrence. There will be a door at the end of the gallery communicating with the staircase belonging to these wards, for the convenience of removing patients from the Infirmary, but which afterwards will be kept shut, to prevent the contagion from spreading." It was later

proposed that these fever wards should receive not only cases accidentally occurring in the house, but also cases of fever admitted directly from outside. Of less controversial nature, and interesting as showing the enlightened view the Committee took of the functions of the hospital, was the proposal to furnish accommodation for a medical library and museum.

With the exception of the establishing of fever wards, these proposals were substantially carried out. The foundation stone of the new building was laid on the 23rd of September, 1801, by Sir Matthew White Ridley, Bart., as representative on the occasion of the Duke of Northumberland. The Duke had headed the subscription list by a donation of £500. The sum contributed up to that date amounted to £2,817; in the end, the sum of £5,329 was raised and spent on the extension and reconstruction of the Infirmary.

Cost of the extension.

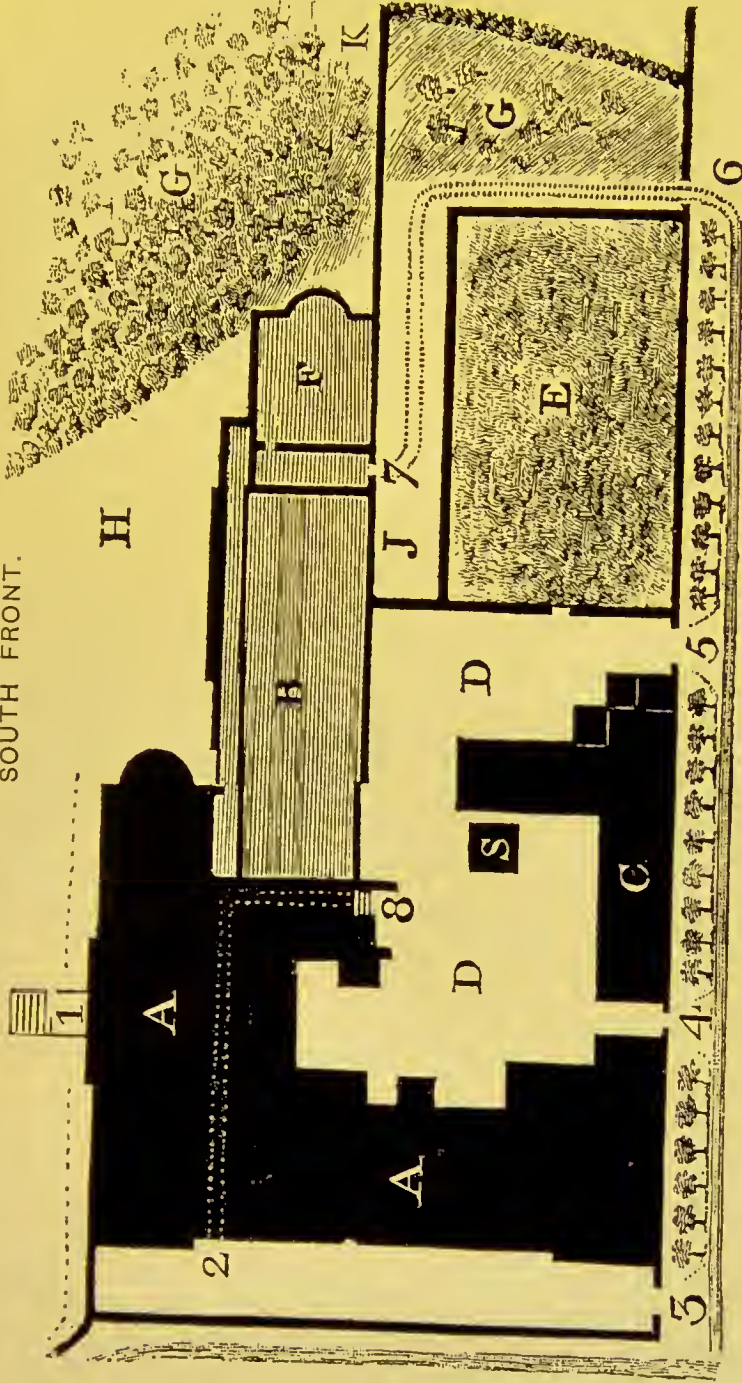
In forming and carrying out their scheme of improvement, the Governors were mainly guided by one of the physicians to the Infirmary, Dr. John Clark. Dr. Clark was a native of Roxburghshire, who, after spending a few years as surgeon on board an East India-man, had for a short time practised in Kelso. He thence removed to Newcastle, where he had now been settled for a quarter of a century. He seems to have had a lifelong struggle with ill-health, but in spite of ill-health, to have been a man of indomitable energy, and of unquenchable interest in his profession. Of some-

Dr. John Clark.

what rough manners and hasty temper, he possessed the intellectual force which compels confidence; and he is described as having been "the greatest benefactor of the afflicted poor that ever appeared in Newcastle." Such a man is equally successful in winning friends and in making enemies; and when, in response to his urgent advice, the Governors advanced so doubtful a project as the creation of a fever hospital in connection with the Infirmary, a storm was at once raised. As may be seen from the plan, precautions were taken to shut off the proposed fever wards from the rest of the house. But public as well as professional opinion became alarmed for the safety of the patients; and at a court of Governors held on June 24th, 1802, the scheme was rejected by a large majority. Still undefeated, Dr. Clark and his supporters appealed to the Bishop of Durham, as Grand Visitor of the Infirmary. In response to the requisition presented to him, the Bishop summoned a special court of the Governors, which was so largely attended—there being 240 governors present—that it was found necessary to adjourn the meeting to the Assembly Rooms. After protracted debate, a compromise was arrived at; it was agreed that if a separate fever house, approved by the Grand Visitor, were not ready by the 31st October, 1803, he should be empowered to open the fever wards of the hospital for the reception of fever patients. Thus stimulated, the opponents of the Infirmary scheme succeeded in establishing, on a

*The fever
wards.*

SOUTH FRONT.



BASEMENT STOREY OF INFIRMARY NEW WARDS AND PROPOSED FEVER-HOUSE, 1801.

- A Old Infirmary.
- B Infirmary New Wards.
- C Out-offices to the Old Building, one storey high.
- D Yard to the Old Building.
- E Burial Ground.
- F Fever-house annexed to the New Building
- G Shrubbery.
- H Lawn before the Infirmary.

- J Yard to the Fever-house intended to be separated by a wall, from the yard to the Old Building.
- K Intended wall to separate the lawn and part of the Shrubbery from the passage to the Fever-house.
- S Safe to the Old Building.
- 1 South front Entrance to the Infirmary.
- 2 Common Entrance to the Old Building.

- 3 Passage Gate to the Old Building
- 4 { Back Gates to the Old Building, for admitting carts, &c, which are kept shut at other times.
- 5 {
- 6 Door of intended passage leading to Fever-house.
- 7 Door of the Fever-house.
- 8 Back door to the Old Building.



site in the Warden's Close outside the town wall, a house of recovery (or fever hospital) which was opened in 1804; while the intended fever wards of the Infirmary were added to the general accommodation of the house.

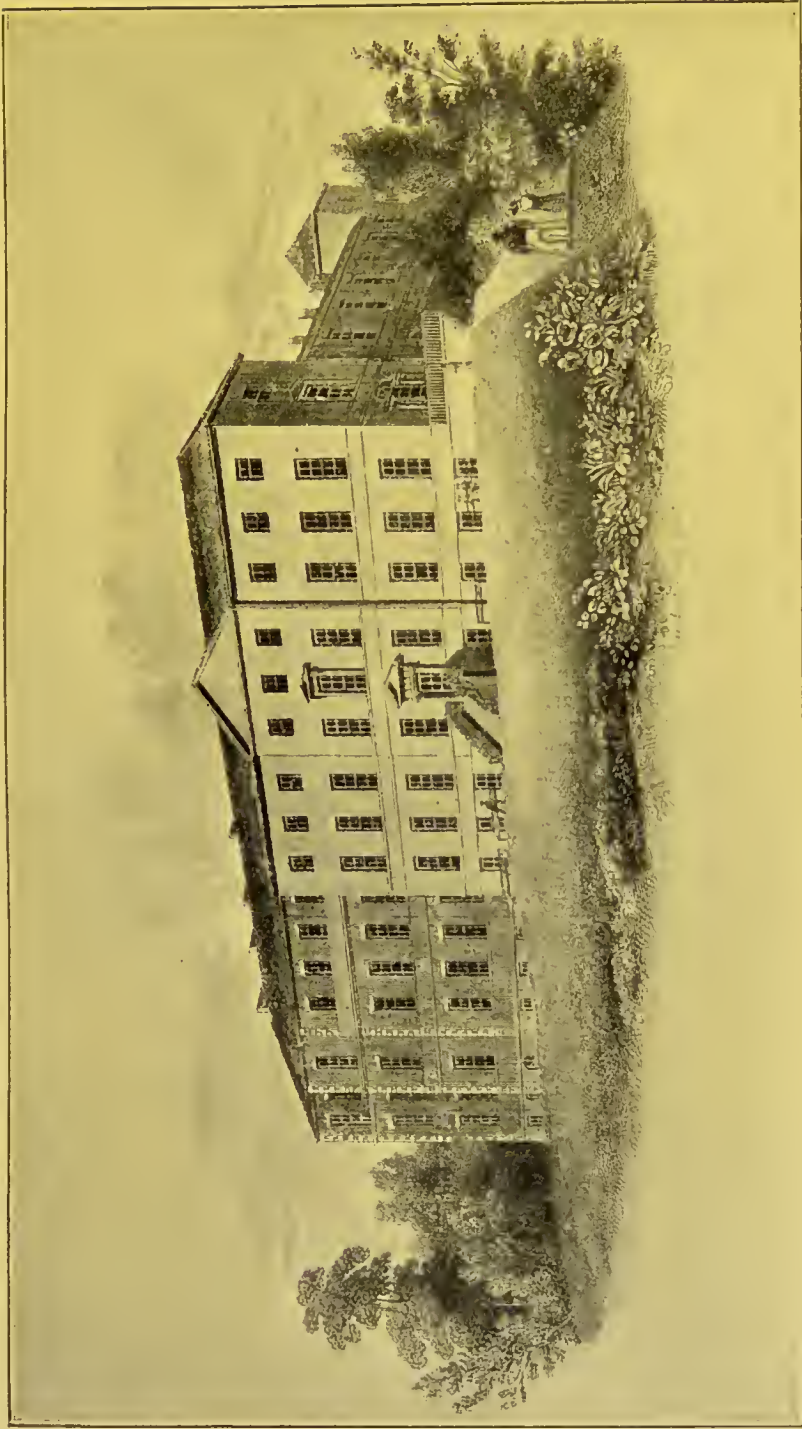
There was, however, another matter in which Dr. Clark's services were of greater value to the Governors than in advocating the annexation of a fever house to the Infirmary. It may not be possible to agree with the details of construction which were adopted in the new building, largely, it is probable, in consequence of Dr. Clark's advice, but he performed an important service in the writing of an able report, based on an enquiry into the work of other hospitals and infirmaries. The hospitals of the kingdom, which nearly all dated like that of Newcastle from the middle period of the eighteenth century, had now accumulated a fund of experience. Their experience showed, what the often appalling mortality in the military hospitals during the war emphasised with still greater force, that sick and wounded people cannot be gathered together in numbers, without risk of consequences which may be more fatal than their original wounds or maladies. Some of the hospitals inquired into still remained as first constructed; others such as Leeds, Northampton, and the Royal Hospital at Woolwich had been rebuilt or modernised; and Dr. Clark was able to point to the greater success of the latter class, in the cure of their

*Dr. Clark's
report
on other
hospitals.*

patients. The lessons inculcated were precisely those which Newcastle might learn from her own experiences. The Infirmary had been ill-ventilated and unwholesome, because ill-constructed; and overcrowding of the wards had been permitted to an incredible extent.* As the result, hospital disease had been prevalent; and the task which Dr. Clark set himself to accomplish was to convince his brethren and the public that the two series of facts stood in the relation of cause and effect. The notion that the size of the ward was a factor of importance in the production of hospital disease sprang from the current belief that danger was in exact ratio to the number of sick and wounded gathered in one place. It was true in part, because in a large ward, full of sick or wounded, the sources of contagion or infection are increased; but it left out of count the consideration that a small ward may be more difficult to ventilate than a large one, and, when overcrowded, will become the more pestilential of the two. Sanitary science was then only beginning, and men were groping after some clearer knowledge of foes which hitherto had always baffled, and often appalled them.

The new building, begun in September, 1801, did not advance very rapidly. There was much dilatoriness on the part of the contractors; and the Committee, wearied with making fruitless remonstrances, threatened

* For Dr. Clark's account of the Newcastle Infirmary see Appendix C.



The Infirmary, 1801.



legal proceedings, and the taking of the work out of the contractors' hands. At last the extension was got ready for occupation, in the end of 1803.

As the institution was starting on a new stage of its career, the statutes and rules, under which it was governed, were recast and re-issued. The most important change was an alteration in the constitution of the Committee. Hitherto, a House Committee of thirty-six members had been selected, twelve from each of three lists of the Governors resident in the counties of Durham, Newcastle-upon-Tyne and Northumberland. Necessarily many of these were unable to attend, on account of distance; and partly from this cause, partly as a sign of the apathy towards the interests of the Infirmary, which had undoubtedly fallen on the community in the latter part of the eighteenth century, the weekly attendances had become very meagre. It followed that, from non-attendance of the Committee, the government of the institution had fallen more and more into the hands of the Matron and House Surgeon Apothecary. Across one page of the minute book, underneath the date of a certain Thursday, is written in a large hand the reproachful legend, "No Governors." More than once it is recorded that, as so few gentlemen had lately attended, the Matron had undertaken this or that responsibility. To remedy this state of things the Committee was now to consist of twelve ordinary, and thirty-six extraordinary members. The

*Re-issue of
statutes and
rules.*

former were chosen from the residents in or near Newcastle, and to them was committed the weekly government of the house; while the extraordinary members were free to attend as inclination and opportunity served.

The code of rules was in the main borrowed from that of the Northampton Hospital; and it contains the groundwork, often in identical phraseology, of that which exists in the statute book of the Infirmary to-day. Of more interest, for their unmistakable eighteenth-century flavour, are the "Rules of professional conduct to be observed by the Physicians and Surgeons," which were appended to the code for the general government of the hospital. In language which might serve as a model of eighteenth-century prose, the physicians and surgeons are enjoined that "they shall study in their department, so to unite tenderness with steadiness, and condescension with authority, as to inspire the minds of their patients with gratitude, respect, and confidence." They are further instructed that "the feelings and emotions of the patients, under critical circumstances, require to be known and attended to, no less than the symptoms of their diseases" . . . "Even the prejudices of the sick ought not to be opposed with harshness; for though silenced by authority, they will operate secretly and forcibly on the mind creating fear, anxiety and watchfulness." With the dread of "the inbred disease of hospitals" vividly on the mind, the physicians and

surgeons are told that it is their express duty not to allow the wards to be crowded; to see, on the other hand, that only suitable cases are admitted; and that they are to give a persevering attention to ventilation and cleanliness. And lastly, that no part of the mental or moral equipment needful for the care of the sick should be overlooked. The following rule, which the habits of the age may be supposed to have rendered appropriate, is introduced:—

“114. The strictest temperance is incumbent on the faculty, as the practice both of physic and surgery at all times requires the exercise of a clear and vigorous understanding; the physicians and surgeons, therefore, should never be unprepared; for on emergencies a steady hand, an acute eye, or an unclouded head, may be essential to the well-being, and even to the life of a fellow creature.”

CHAPTER IV.

THE PERIOD 1801-1850.

1801. The courage and discretion of the Governors, in undertaking the reconstruction and extension of the Infirmary, were justified by a revived interest in its prosperity. The amount required for the work was not, however, soon completed. In 1805, the sum of £1,265 was still required to clear off the liabilities of the Building Committee, and a special appeal was made. It was only in 1810 that the Governors were able to include in their *Report* a final list of the "Benefactions towards the Extensions of the Old Wards and on account of the Additional Buildings," and to say that all demands against the Infirmary, of what nature soever, up to March 31, 1810, are discharged."

The new building.

The new building was not in any sense an architectural ornament. It was built of brick, and therefore was in displeasing contrast with the stonework of the original structure; and it spoilt the symmetry of the latter, with the south front of which it was placed in direct line. The faults of its internal arrangements were the smallness of the wards, which at the time was thought to be their chief merit; and the fact that they had been, with ill-judged purpose, turned away from

the sun. The gain effected by the additional accommodation should have been at least some relief of pressure, and the reconstruction of the hospital must have materially improved its sanitary condition. But very soon the old overcrowding was in full force. In 1804, a year after the completion of the reconstruction, the House Committee directed the serious attention of the Governors in Quarterly Court to the increase in the number of patients beyond the means of proper accommodation. "More beds," it was stated, "were crowded into some of the apartments than they were intended to contain, and several instances have occurred when two patients have been put into one bed." The gain in number of beds by the enlargement had not indeed been great. Before the reconstruction, what may be called the officially recognised number was eighty-four; it was now ninety-nine or a hundred. But the official number had been, and still was, a mere counsel of perfection. On 1st April, 1801, when on account of the cost of maintenance the admissions were being sternly restricted, there were in the house eighty-five patients; and during the year then elapsed 643 in-patients had been treated. During the last six months of 1804, the number of in-patients had frequently exceeded 100, and at one time there were 112. In 1810 there were 105 patients in the house on the 31st of March, and the number treated during the year had been 925, 203 more than in 1805. And so the increase went on till, in 1830,

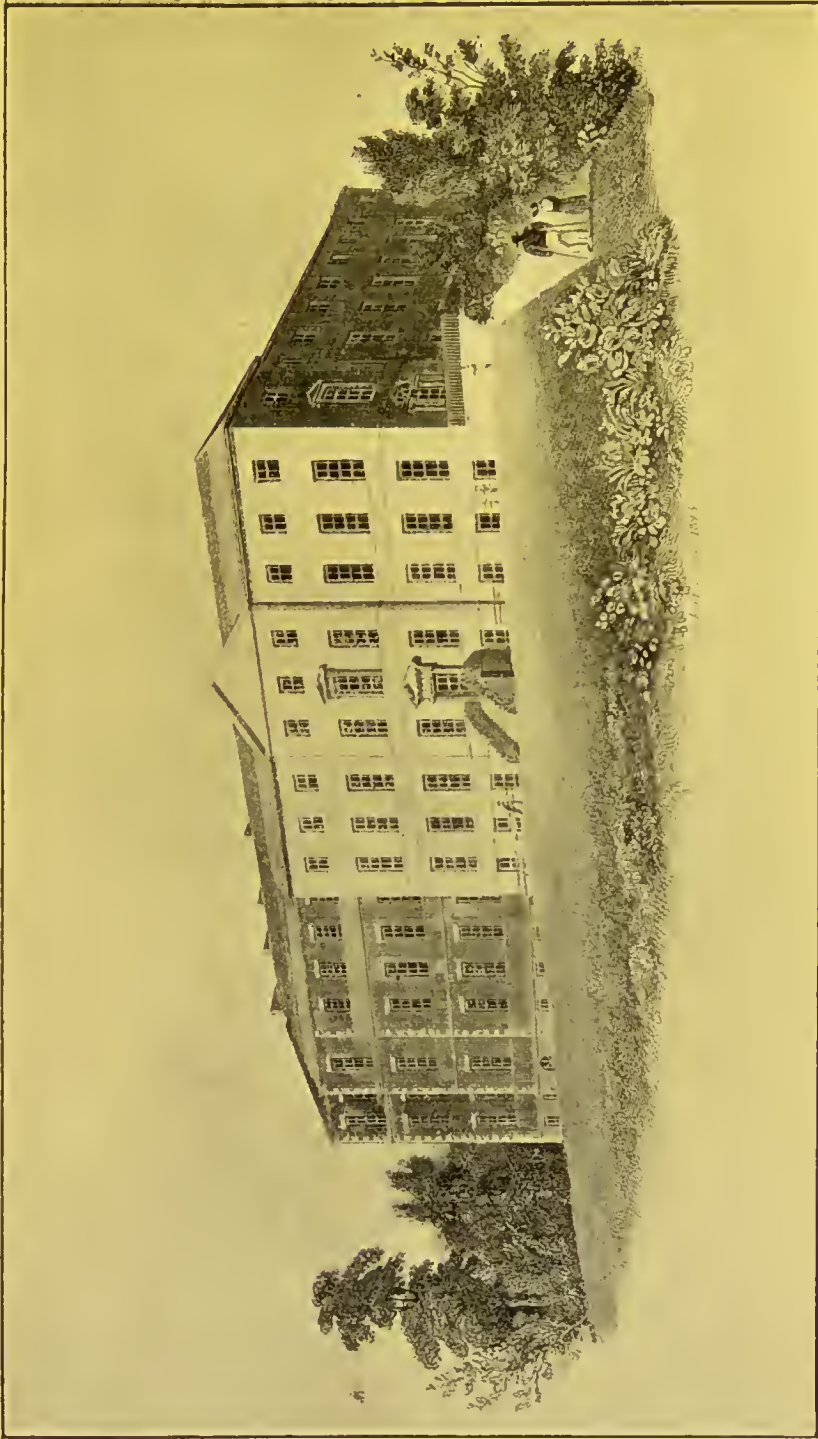
*Overcrowd-
ing.*

the number on the closing day of the hospital year was 128, and the total number of in-patients during the year was 1,096. What influence this persistent overcrowding had on the production of the "inbred disease of hospitals"* we are not told. There exists no report, lay or professional, for this first half of the nineteenth century, in which the subject is even mentioned. But silence in this matter is probably as informing as speech. We know what was happening in other hospitals throughout this period; and it is not likely that Newcastle fared better than the others.

Increase of population.

It is easy to blame this overcrowding, and yet much might be said in excuse. The population of Newcastle, throughout this half-century, was increasing by leaps and bounds. In twenty years, from 1801, it had grown from 28,366 to 35,181; in twenty years more the latter number was nearly doubled. And this growth was not in Newcastle alone; it was proceeding at like speed in the whole district, for which the Newcastle Infirmary had been founded. But little relief to the pressure was afforded in 1830, by the addition of a third story to the east wing of the original hospital. Twenty-two beds were thus added, which were occupied by special cases, recently deprived of hospital provision by the elosure, from want of funds, of the Lock Hospital, till then existing in another part of the town. To complete and give further point to this record of a vain endeavour

* An expressive phrase used in the Special Report, 1801.



The Infirmary, 1830.



to keep pace with the hospital needs of a population growing at an unprecedented rate, it is only necessary to refer to a report of the Governors, issued at the end of the half-century. It is there stated that, in 1846, twenty beds were added to the accommodation of the house. But these twenty beds were obtained by "compressing them into the existing wards; and, by a kind of arithmetic of necessity, they were said to have brought up the available number to 170.

Till 1850 the *Annual Report* of the state of the Infirmary appeared in the form of a folio sheet. It contained no medical details, and no report of their work was supplied by the physicians and surgeons. We are left, as best we may, to construct, from a general knowledge of the science and practice of the period, a picture of their daily round of service. They were men of high professional standing, whose reputations were made in the Infirmary, and whose science and practice were abreast, or in advance of their time. Many of them were important figures in public life. Clark, already mentioned, Headlam and White among the physicians were men of this stamp. Among the surgeons, the names of Ingham, Baird, McIntyre and Henry Heath are still recalled for what they contributed to their art, and for their skill in its practice. During the reconstruction in 1801, while Clark, the physician, was the most energetic adviser of the Governors, their most judicious guide was William Ingham,

*The Annual
Report.*

*The
physicians
and
surgeons.*

*William
Ingham.*

the surgeon. He was a man of ripe experience. He had been the pupil, and was the successor, of Richard Lambert, one of the founders of the Infirmary. He had become a man of social consequence, and, from his long service in the hospital, his word had almost become law in its policy. When the Duke of Northumberland opened the list of benefactions towards the extension and reconstruction, he forwarded his donation in a letter to Mr. Ingham. When some misunderstanding arose with Sir Matthew White Ridley, with regard to his trusteeship, Mr. Ingham was deputed to see him, that the difficulty might be cleared away. At the time of the reconstruction he had been for twenty-three years one of the surgeons to the Infirmary, and he continued in office till 1812, when he retired. The gratitude of the Governors for his long services was warmly expressed; and his picture, presented to them by some of his personal friends, was a valued addition to their gallery of portraits.

Financial position.

A direct effect of the reconstruction scheme of 1801 was a revived interest in the Infirmary which showed itself in an increase of liberality. The receipts from all sources in that year had been £1,750 13s. 8½d., which fell seriously short of the year's expenditure. In 1802 the sum of three years' deficits left the Infirmary indebted to its treasurer, to the amount of nearly £1,000. In 1805 the receipts were £3,098 1s. 8½d., and the expenditure £2,944 15s. 0½d., leaving a favourable



Wm. Ingham.

From a Painting by Wm. Nicholson, R.S.A.

balance of £153 6s. 8d. The tide had now fairly turned. But in the meantime investments had been called in to clear off liabilities, and it was evident that more than an ordinary effort was needed to extricate the Infirmary from its difficulties. The report of a special committee appointed for this purpose is worth perusing for its clear statement of the position, for its dignified sense of what was due from the public, and for its suggestion of a remedy which was afterwards carried into effect.

REPORT OF THE COMMITTEE APPOINTED TO ENQUIRE INTO THE
DECLINING STATE OF THE FUNDS OF THE CHARITY.

7 Ap., 1803.

The Committee appointed to examine and report the state of the funds of the Infirmary, proceed with regret to lay before the Quarterly Court proofs that the annual support has by no means kept pace with the increasing price of the necessaries of life, but that for several years past the amount of subscriptions has fallen much short of the unavoidable expenditure.

The first considerable disproportion between the receipt and disbursement appears to have taken place in 1800, when the balance against the Infirmary amounted to £304 19s. 7d. In 1801 it amounted to £435 12s. 5d. At length the increasing demands and deficient supply made the unfortunate expedient of calling in £1,000 from the capital indispensably necessary. But even this extraordinary supply, supposed adequate to meet present exigencies, left in 1802 a balance against the charity of £230 12s. 7d. Since that time, notwithstanding the seasonable augmentation of subscriptions to the amount of £262, the unprecedented receipt of £268 of long accumulated arrears, and the uncommon assiduity of Messrs. Lawton & Lloyd in managing the disbursement, even now a deficiency remains of £297 10s. On the danger of drawing upon the capital of institutions of this nature, the Committee scarce think it necessary to dwell; such funds, the resources against the fickleness of public opinion and the decay of liberality, have ever been

considered a sacred deposit, not to be disturbed but during circumstances of the most imperious necessity. If then the causes, which rendered this dangerous step unavoidable, continue to act, and this remedy continue to be applied, the final extinction of the capital may very soon be completed. Of such causes the following is the most important: at the institution of the Infirmary, a ratio of privilege and compensation between the subscriber and the charity was necessarily established: the sum subscribed by the Governor was nearly sufficient to defray the expense of the patient recommended. Very soon indeed this ratio would become unequal from the ordinary advance in the value of the necessaries of life; but the enormous increase of such necessaries of late hath rendered the disproportion still more apparent. By an average estimate of three years, made by one of the physicians, each of his patients was fifty-four days in the house and received medicines sixty-four days. By a calculation, which it would be superfluous to transcribe, it appeared that the weekly expense of each patient amounts to eight shillings, consequently each patient costs the Infirmary more than £2 16s.

The report goes on to advise that in future the subscribers should forego half their privilege of recommending. Hitherto each subscriber of one guinea could recommend one in-patient, or two out-patients; the subscriber of two guineas, double these numbers. The curtailed privilege would allow the subscribers of one guinea to recommend two out-patients; a subscriber of two guineas, one in-patient or four out-patients. In 1803, when this report was submitted, the Governors were not ready for the change; but it was made in 1807, and did much to relieve the financial strain upon the charity.

One point, which may be noted in the report, is the long average stay of the patients in the house. It is evident that this was not exceptional, as on other occa-

sions, in later years, the House Committee drew the attention of the medical officers to the crowded state of the house, and the long periods that many of the patients have continued in it.

Though a special appeal had to be again made in 1840, by which, through the agency of a special collecting committee and by church collections, a sum of £1,418 was realised, there was no further serious financial strain throughout the remainder of the half-century. The period ended with hardly any increase of invested capital. In 1849 it was £13,700; in 1801 it had been, before the encroachments made upon it, £13,000. But the receipts from all sources had increased to £4,109, though this was scarcely in due proportion to the greatly increased number of patients admitted. In 1849 the number of in-patients had risen to 1,550.

In its time of stress the Infirmary had found a very generous patron and friend in the Grand Visitor, the Right Reverend Shute Barrington, Bishop of Durham. To the reconstruction fund the Bishop contributed £100, and a few years later he gave the generous donation of £500 to the general purposes of the charity. In his old age he made still another gift, this time in response to the appeal of the Governors. Through the Vicar of Newcastle, they made the request that the Bishop would permit a copy of a full-length portrait of himself to be taken, with a view to its being placed

*The Bishop
of Durham.*

in the Governors' hall. The Bishop replied, regretting that it was not in his power to comply with the wish, "as he had never yet sat for one that size, and his advanced age prevented his offering an original." The Governors begged that he would confer a copy of such portrait as he was in possession of; and the result was the portrait painted by W. Owen, R.A., which now hangs on the wall of the board room.

The straits in which the Infirmary found itself in the early years of the century were in part, at least, the result of the war. It was its good fortune to profit directly by the peace. When the short-lived peace of Amiens was declared, it would have been right for Newcastle and the neighbouring town of Gateshead to celebrate the event by an illumination. In lieu of this, a house-to-house collection was made of the money which would have been so spent, in order that it might be devoted to charitable uses; and one half, amounting to £318 10s. 10d., was given to the Infirmary. Nearly forty years later, the celebration of another event which brought more lasting blessings to the country was made the occasion of help to the Infirmary. In 1840, a ball took place in the Assembly Rooms in honour of Queen Victoria's marriage; and from the proceeds of the ball the Infirmary received the sum of £94 12s.*

An appeal to churches and chapels was a resource

* For notices of some interesting donations and benefactions see Appendix D.



Shute Barrington, Lord Bishop of Durham.

From a Painting by Wm. Owen, R.A.



of which the Governors of the Infirmary always availed themselves in time of difficulty. Such an appeal was addressed to the clergy and ministers of all denominations in 1803, and a copy of their resolution embodying this appeal was submitted to the Bishop of Durham. Then for the first time, but not the last, the Infirmary was brought in contact with the fact that other claimants for public support had arisen in its own district. The Bishop impressed upon the Governors that their intended appeal should not prejudice the interests of the recently founded hospitals at Durham (1792) and Sunderland (1794), and should therefore not extend beyond those parts of the county of Durham which lay adjacent to Newcastle. Even so restricted, the appeal furnished substantial help; as a similar appeal did again in 1840.

*Appeal to
churches
and
chapels.*

Throughout the early years of the century the Infirmary had no more helpful friend than the Theatre. Again and again substantial sums were handed over, sometimes without even deducting expenses, as the result of special benefits at the play; and these benefactions are not the less interesting, because they were associated with the names of Macready and Kemble.

As the century grew to be middle-aged, the Governors must have seen a wonderful change taking place in the neighbourhood of the Infirmary. In 1830 the enclosure of the Forth Walk still existed, and most of the town wall from the West Gate to the Close was still

*Changes
in the
neighbour-
hood.*

*The
railway.*

standing. In the twenty years which followed, the old landmarks and open spaces disappeared, and the chief agent which produced the change was the railway. The first record of the Infirmary coming into contact with its new neighbour refers to a meeting of the House Committee with the directors of the Newcastle and Carlisle Railway, on the 7th of January, 1840, with a view to negotiating an exchange of ground. It was the first of many similar meetings and negotiations, which are not easy to follow to any definite ending. They refer first of all to the approaches to the station house, to the west of the Infirmary grounds; then to the filling up of the dene in the Infirmary garden;* and later, in 1844, to ground required for the continuation of the line of railway to the intended station in Neville Street, The Infirmary, apart from these negotiations, did not find their encroaching neighbour a pleasant associate. Complaints of the condition of fences and of drains pass from the one to the other; and in one communication the attention of the directors is drawn to a grievance which it has never been found in their power to abate. They are begged to give attention "to the desirability of deadening the noise from the engine crossing the public road below the Infirmary, as the Committee understand this can be effected by using felt or other material in such places."†

* "The dene was filled up in 1849 with earth removed in making the new street from Clayton Street to Neville Street, near the Catholic Church" (Bewick Street). Minute Book, July 12th, 1849.

† Minute Book, June 4th, 1846.

CHAPTER V.

THE DOBSON WING.

With sharp abruptness, the year 1850 marks the 1850.
 close of one epoch and the beginning of another, in the
 history of the Infirmary. It was now nearly a hundred
 years old, and had again fallen into that state of dead-
 ness which overtakes an institution hopelessly unequal
 to its task. But the sense of abruptness in the transi-
 tion from one epoch to another is produced, or the
 transition may be symbolised, by the different manner
 in which the Governors in that year began to issue their
 Reports. The single sheet, scarcely changed from its
 first issue, with its benevolent platitudes repeated in
 identical words year after year, and its meagre supply
 of information, was discontinued. Its place was taken
 by a *Report* in booklet form, in which it was evident
 that the House Committee desired to place before the
 Governors and the public the fullest information on the
 state of the charity. Upon anyone who lays down the
 old-fashioned sheet, which contained the *Report* for
 1849, in order to peruse the pages of the booklet issued
 in 1850, the effect produced is that of a sudden stepping
 out into the light. In reality it symbolised a re-awaken-
 ing. In 1845, the senior surgeon, Mr. T. M. Greenhow,
 had written drawing the attention of the Governors to

*Annual
 Reports.*

*Mr. Green-
how's
proposals.*

the inadequacy of the hospital. The purport of his letter had been adopted in a resolution, and a fund had been opened, which, however, in five years amounted to only a few hundreds lying unemployed in the hands of the treasurer. The Committee, as they explained, had thought it inexpedient to agitate more actively the resolution which they had passed in 1845. In 1850 Mr. Greenhow again wrote, reiterating his facts and arguments, and this time the seed which he designed to sow fell on better prepared soil. His argument was succinct and convincing. He based it on the enormous increase in recent years in the number and extent of the collieries and factories of the district, on the three-fold increase of population in the three counties since the foundation of the Infirmary in 1751, on the hopeless overcrowding of the wards, and the constant presence in them of hospital disease in one or other of its forms.

Besides the urgency of the medical officers, for whom Mr. Greenhow spoke as their senior, there was at this time an influence in the Infirmary which was being successfully exerted in favour of progress. In April, 1849, the House Committee had appointed Mr. C. J. Gibb as house surgeon, in succession to Mr. Benson, who resigned on account of ill-health. To anyone who had no further sources of information than the pages of the minute book, and who knew nothing of Mr. Gibb's subsequent career, it would be evident that he was then

evincing a rare faculty of organisation, and that the work of the hospital under his direction, as the agent of the Committee, was undergoing a striking change.* It is difficult not to ascribe to the impetus which Mr. Gibb was imparting to the management some of the willingness with which Mr. Greenhow's proposal of a substantial enlargement of the Infirmary was now listened to. In their Report of 1850, the Committee made a tentative announcement of the scheme, and finding that this was cordially received they entered fairly on its execution at the one hundredth anniversary meeting in April, 1851.

Once started, the undertaking was admirably carried out. The first step was the selection of an architect, and the Committee had not far to seek. There was one man then in the North of England whose reputation as an architect was pre-eminent, and the Committee therefore, as a matter of course, invited John Dobson to give his advice and to draw plans. But they had first gained the approval, and enlisted the warm sympathy, of the Duke of Northumberland in their scheme. The Duke—Duke Algernon—as much from his large-heartedness and wisdom in practical affairs as from his great position, held a unique sway in his county. His approval and assistance, in money and advice, were enough to ensure the success of the undertaking. All plans were submitted to his criticism and

* Mr. Gibb became an Honorary Surgeon to the Infirmary in 1855 and retired in 1870. Since then he has continued to be a generous friend to the institution.

suggestions; and perhaps more than in anything else, his influence was of value in stimulating the Committee to aim at the highest standard in the designing and carrying out of their work. His first donation of £500 was accompanied by the promise that it should be repeated, on fulfilment of the condition that all the improvements in the London and other hospitals should be introduced as far as possible into the Infirmary.

*Visit to
other
hospitals.*

To the Duke the Committee owed the suggestion that a small sub-committee, accompanied by the architect, should educate themselves to the work by a tour of inspection of other hospitals. A visit in the month of August, 1851, was made to the Manchester Infirmary, the Liverpool and Birmingham Hospitals, the London Hospital, St. Thomas', St. George's and the Middlesex Hospital; and by the architect alone, at a later date, to the new hospital at Brussels. The result of the tour was embodied in a report to the Building Committee, full of information of the most practical kind, and much of which was turned to good account in the construction of the new building and the reconstruction of the old. The report was signed by Peregrine George Ellison, James Dent Weatherley, John Brunton Falconar, Thomas Michael Greenhow, John Dobson and Charles John Gibb.

The plans were finally settled, and the contract signed, for the building of the contemplated new wing in May, 1852, and the ceremonial laying of the founda-



tion stone by the Duke of Northumberland took place in the ensuing August.

The scheme comprised the building of a new wing at right angles to the addition of 1801. It involved the obtaining of some additional ground from the Corporation and also the removal of the old burial ground. The new wing was to consist of a basement and three storeys. Each storey was to consist of two large wards, or rather of a large ward divided by an arched partition into two. There were thus six wards, each containing 24 beds, so that an addition to the hospital was provided of 144 beds. This addition, equal to the legitimate accommodation of the old hospital, permitted a complete rearrangement of the latter. The out-patient department, hitherto lodged in the east wing, was provided for in the basement of the new. The space in the first floor of the east wing, thus set free, was converted into a dining room, museum and library, and a large accident room. The second floor of the east wing became living apartments for the resident officers, while the third floor remained the Magdalen Ward.

*Scheme of
building.*

It was decreed that the urgent need of the new building should be demonstrated in a forcible manner, even before its completion. The old building continued, during the erection of the new, in its old state of dangerous unwholesomeness. An outbreak of erysipelas and an epidemic of typhus, in the spring of 1853, led to one of the wards of the new wing being taken possession

of in its unfinished state, in order to relieve the overcrowding of the old hospital. But in the autumn of this year an epidemic of a more terrible nature occurred.

The cholera outbreak.

In August cholera broke out in Newcastle, and for several weeks in autumn it devastated certain quarters of the town. It invaded the Infirmary and six fatal cases occurred. That the tale of mortality was not greatly larger was due to the prompt measures that were taken to relieve the overcrowding, and as far as possible to set right what was wrong in the sanitary state of the house. In this the unfinished wards of the new wing were turned to good account. But the epidemic, while it lasted, threw a great strain on the resources of the hospital, and especially on the strength and devotedness of the resident staff; and the institution rose immensely in the public esteem from the manner in which the emergency was met. The hospital was made free and open to the poor at all hours. Attendance was given in the out-patient department and in the dispensary night and day, so that those who were apprehensive, or were threatened with premonitory symptoms of an attack, knew where to find the needed remedies and advice. The knowledge that such a refuge was at all times open did much to allay panic among the neighbouring poor, and many a workman went with a greater confidence to his work when he had first called at the Infirmary and provided himself with a bottle of medicine against the dreaded disease.

A year later, on the 6th of October, 1854, the Infirmary was again called upon to open its doors to the victims of a historical calamity. On the morning of that day, the terrible explosion occurred in Hillgate, on the Gateshead side of the river, which was followed by a devastating fire in Newcastle. In the space of four hours the victims, to the number of a hundred and twenty-three, were received into the Infirmary. Sixty-three of these, when their injuries had been attended to, were sent home. The remaining sixty were admitted as in-patients. So great and so sudden a demand upon the capacity and resources of the Infirmary could not have been met, save for the now available accommodation of the new wing. In the new accident room, which had been brought into use just two days before, the injured could receive first attention with orderly promptitude. In the new wards there was ample space for those who required admission; and in the successful treatment of those who survived the first terrible effects of their injuries, it was noted that no sign of the "inbred disease of hospitals" supervened.

*The great
explosion
and fire.*

When the formal inauguration of the new wing took place, on the 18th of January, 1855, it was natural that the speakers should dwell with satisfaction on the way in which the Infirmary had been enabled to play so beneficent a part on these occasions of public calamity. The reference gave an added touch of reality to the praises which the Duke of Northumberland, who

*Opening of
the Dobson
Wing.*

presided, and all who took part in the ceremony, were able to bestow. The Duke expressed his entire approval of all that had been done by fulfilling the conditional promise he had given of a second donation of £500. In their report read on the occasion, the Building Committee, guided in a measure by the past history of the Infirmary, ventured on the anticipation, or prophecy, that the additions and alterations which they had carried out would meet the requirements of the Infirmary for the next fifty years. The prophecy has not been literally fulfilled, but time has not detracted from the merits of the work nor lessened the tribute of admiration due to those who planned and carried it to so satisfactory a completion. The Committee found the Infirmary an antiquated and inadequate institution. They converted it into a great modern hospital, and its career as such dated from the day when the Duke of Northumberland presided, in the Percy Ward, over the inauguration of the new building, which has since, in compliment to its architect, been known as the Dobson wing.

The cost. The public were not slow to recognise the good work that had been done. The whole cost of the additions and alterations amounted to £10,500. Of this £7,000 had been subscribed at the date of the formal opening, and further contributions soon followed, reducing the deficiency to £1,285. The wiping out of this balance was connected, in an interesting manner, with the





Algernon, Fourth Duke of Northumberland.

From a Painting by Sir Francis Grant, P.R.A.

services the Infirmary had rendered to the sufferers from the great fire. A Fire Fund had been formed, which, when it had met all demands upon it, had a surplus of £944 15s. 6d. This, with the consent of the contributors, was handed over to the Infirmary. But in addition, many contributors to the Fire Fund had stipulated, in the first instance, that if the fund should reach a sufficiency without their subscriptions these should be transferred to the Infirmary. The subscriptions thus transferred amounted to £245 4s. 9d., making a total of £1,190 0s. 3d. which the Committee of the Fire Fund handed over to the Infirmary Building Fund. A cheque for the small balance, from a regular supporter of the Infirmary, closed the Building Committee's account.*

As a memento of his munificence, and of the still larger debt of gratitude which the Governors owed for his counsel and encouragement, a portrait of the Duke of Northumberland, by Sir Francis Grant, P.R.A., was with his Grace's permission placed in the board room of the Infirmary.

*Portrait of
the Duke.*

The demands of the Building Fund did not cause any falling off in the annual support of the hospital. On the contrary, the fresh start led to revived interest and increased liberality. Comparing the receipts from all sources during the six years preceding the opening of the Dobson wing with the six years that followed, we

*Increased
support.*

* Mr. John Greene, Gateshead.

find that the average of the latter series exceeds that of the former by nearly £1,000 a year. It has been already noted in this record that the wave of popular enthusiasm, with which the Infirmary was established, left it at the end of the first ten years of its existence with what, for the period, was a handsome endowment. The re-awakened interest which followed the reconstruction in 1801 sufficed in a time of unexampled difficulty to carry it safely through a crisis which almost threatened its continuance. The same sequence on occasions of less moment than these has been again and again observed.

*Stephenson
bequest.*

In 1861 the Infirmary received a splendid addition to its capital by a bequest of £10,000 from the late Mr. Robert Stephenson. It gave an additional value to the bequest that it bore a name which stood for so much in the industrial greatness of Newcastle, and it was a natural impulse which led the Governors to add the portrait of Robert Stephenson to their gallery of conspicuous benefactors.

*Pigg's
Charity.*

A benefaction of older date and of interesting history figured prominently in the Report for 1857. Amongst the receipts for the year was a sum of £280 2s. from the trustees of Pigg's charity. The sum was in addition to the rents of the estate which the trustees had now for many years paid over to the Infirmary, and the Committee took advantage of the occasion to relate the history of the charity. The trust



Robert Stephenson.

From Replica of Painting by John Lucas.



property, it was explained, was that of a certain John Pigg, who, by his will dated 27th October, 1688, had left all his freehold and copyhold property to trustees, and directed that after annually paying £5 to the minister of Earsdon, and £5 for the repair of highways in the county of Northumberland, the residue of the rents and profits should be devoted to the relief of such poor people in the counties of Durham, Northumberland and Newcastle-upon-Tyne as the trustees should think fit. The recipients, however, were to be such persons as had not fallen into poverty through idleness or prodigal living, but only those who by sickness or decrepitude were disabled from work. By an order of the Court of Chancery, in 1832, the trust had been resettled. It was ordered that the payments to the minister of Earsdon and for the repair of highways should continue to be made, and that £20 per annum should be set aside as a reserve fund for extraordinary repairs to the trust estate, until this fund should amount to £500. The annual residue of the rents was to be contributed to the funds of the Infirmary for the sick and lame poor of the counties of Newcastle-upon-Tyne, Durham and Northumberland, who were very properly considered to fulfil the testator's conditions. The sum of £280 2s., now handed over in addition to the rents, represented an accumulation of the reserve fund for repairs. The property, which consisted of a farm and dwelling-house at Earsdon, and of three freehold dwelling-houses

on the east side of Pilgrim Street, Newcastle, with a large garden extending to Erick Street, was now let upon repairing leases, and therefore there was no present need for increasing the reserve fund beyond the amount of £500 ordered by the Court of Chancery.

*Purchase of
land from
Railway
Company.*

In 1863 the Governors made a fortunate purchase of a piece of land adjoining their grounds and belonging to the Newcastle and Carlisle Railway. The ground was so situated that it could not be allowed to fall into other hands and the main object of the purchase was to secure an open space in front of the Infirmary. The cost of the purchase, with the addition of the amount spent in enclosing it, was £1,347. It happened that the year in which this purchase was made was a good one, so that the Governors were able to pay this amount out of the year's receipts and still have a surplus on the year's accounts of £1,480. The unearned increment of forty-two years' possession of their purchase has recently proved the year in which it was effected to have been a very good one indeed.*

*Work of
hospital,
1850-75.*

When we come to review the work of the hospital during the quarter of a century from 1850 to 1875, we find that for the time there is an end to overcrowding.

* This land was re-purchased by the North-Eastern Railway Company in 1904 for £11,000; and at the same time the Company took over the whole of the ground which the Infirmary held under lease from Mr. George Anderson. For their leasehold interest in this land the Infirmary received £2,695.

chloroform, the use of which was becoming general in 1850, had been the motive spring of this advance. The unspeakable boon which chloroform was proving to the sufferers in the Infirmary was warmly referred to in the *Report* for that year. And if a boon to the sufferer, it was an ally to the surgeon. It enabled the patient to pass through, and the surgeon to undertake, operations which without it were not possible. Not only, therefore, does the number of operations show increase; their change in character and magnitude is more striking still. The surgical evolution which, in the last quarter of the century was to proceed to such wonderful issues on the introduction of antiseptics, had already set in as the outcome of the discovery of chloroform.

*Hospital
disease.*

For two or three years after the opening of the new wing it seemed as if that foe to surgical success, the "inbred disease of hospitals," had been finally got rid of. But the hope, if indulged in, was not long permitted. In 1858, erysipelas re-appeared and prevailed during the summer. That mysterious poisoning of the blood, pyaemia, which in former days had so often stepped in to mar the success of many a well-planned operation, again invaded the wards, the new as well as the old. The three next years were as bad as any that could be recalled in the old unregenerate Infirmary. The details, even at this distance of time, are too painful to be dwelt upon; and to those whose ill-fate

The year in which the new wing came fully into occupation was that in which the largest number of in-patients were received. There were 1,916, a great increase on the 1,426 who were treated as in-patients in 1850. But the number had again fallen to 1,679 in 1875 and it had only exceptionally risen above that figure in the intervening twenty years. It was in the other departments of the hospital that a great increase in numbers occurred. The *casuals*, who were seen without letters of recommendation and treated as emergency cases, grew rapidly in number year by year, and it was thought that in this direction the hospital was greatly extending its usefulness to the poor. From an insignificant number, which was not even mentioned in the records previous to 1850, these cases had come to be counted by thousands. The largest number that in this category received treatment in the Infirmary, during the quarter of a century at present under review, was upwards of 16,000 in the year 1870. In subsequent years the department has reached proportions in the hospitals throughout the country which have given anxious thought to those who are intelligently concerned with hospital administration.

*Increase of
casuals.*

In the increase in the number of operations performed in the Infirmary during this period, is to be found an indication of the great advance which was now in progress in the art and practice of surgery. The introduction of anæsthetics, more especially of

*Increase of
surgical
work.*

it was to work through these years, disappointment must have added bitterness to the experience. There was no suggestion of overcrowding now, and the glaring sanitary defects of the old building were believed to have all been corrected in the reconstruction. The old explanations no longer held good and a new explanation had to be sought in the practice of scouring the floors of the wards, and in the noxious effluvia which rose from the wet wood. The high authority of Miss Florence Nightingale could be cited for the opinion "that washing floors was one cause of erysipelas in hospitals."* Her advice, therefore, was followed. The floors were planed, saturated with linseed oil, varnished and allowed to harden; they were then polished, and for the future were dry-rubbed instead of being washed. They had been made and were kept non-absorbent. It was a wise change but it did not stop septic disease. The next year the sanitary condition of the wards was reported to have been satisfactory but pyaemia had not been absent. Things grew worse again and the cycle of evil years culminated in 1867, when throughout the winter erysipelas and phadagaena prevailed "owing to the long continuance of severe weather." The excuse which still remains when all other has failed had to be resorted to in the end. No subsequent year had so black a record as this, but nearly a decade

* *Notes on Hospitals and Hospital Nursing*, quoted in *Infirmary Medical Report*, 1861.

had still to pass before the scourge of hospitals found its explanation and its remedy, in the investigations of Lister and the introduction of antiseptic surgery.

In all this sad experience, Newcastle Infirmary was not singular. Most of the large hospitals of the country were in like case; and Simpson of Edinburgh, gathering statistics from a wide field, had led a crusade against the system. It seemed that the treatment of large numbers of sick persons, especially of those undergoing surgical operations, in one building was condemned by its results, and could not be continued. Even where this extreme view was not accepted, there was an end to a dull acquiescence in evils which had hitherto defied cure. There followed a quickened attention to the details of hospital management, to the diet of the patients, and to the importance of sanitary shortcomings. In all important departments the change effected during this period amounted to a revolution. The nursing of the sick ceased to be a casual employment, and became a profession. The change began, in the hospitals in the Crimea, in the work of Florence Nightingale; it developed, largely through her influence, after her return to England; and in the interest which was awakened in the better organisation of hospitals it took definite and lasting shape.

*The nursing
in the
Infirmary.*

Of the nursing in the early days of the Newcastle Infirmary we learn very little from any references to the subject in the minute books. It is certain that the

nurses employed were few in number and were poorly paid; it is probable that the patients, to a large extent, were left to nurse each other. The convalescents shared with the nurses in the care of the bad cases. In the re-arrangement of the Infirmary in 1807, the breaking up of the large wards into small rooms was carried out with this object in view, that "when a patient's case requires perfect quiet, when he is apt to disturb others, or is afflicted with noisome symptoms, he will be placed in a separate room with a convalescent or a nurse." After the enlargement of the hospital in 1855, when the new era in nursing had begun, there is no record of the number of nurses engaged in the Infirmary till the year 1865. In that year there were eleven nurses. Three years afterwards the number had been increased to thirteen, with a daily average of 175 patients—a proportion of one nurse to 13·4 occupied beds. A report from the surgical staff to the House Committee in March, 1868, drew the attention of the Committee to the very scanty staff of nurses in the surgical wards; and at the annual meeting of the Governors a week later, in a letter which was read from the senior surgeon,* it was stated that "on the low flat that there were two day nurses and one night nurse to sixty patients," that is, the two day nurses had each thirty patients to attend to. The question of

* Dr. G. Y. Heath.

the nursing in the Infirmary became the subject of protracted consideration, and it was not till two years later that the staff was increased to eighteen. The efficiency in training as well as the number of the nursing staff was not left out of consideration, and the appointment of a superintendent of nurses, well educated herself and capable of guiding the education of those under her charge, was urged upon the Committee. This essential of a good nursing staff was happily provided by the generosity of a lady at that time prominent in Newcastle for her liberal giving. Mrs. Abbot undertook for ten years to pay the salary of a superintendent of nurses, stipulating only that the appointment should be in the hands of the medical officers of the Institution.

Concurrently with this movement within the hospital, a scheme was initiated for the organised improvement of nursing in the town and district, and chiefly through the efforts of the senior surgeon of the Infirmary, Dr. Heath, and of the senior house surgeon, Mr. Frederick Page,* a Nurses' Home and Training School was established in Newcastle.

*New
operating
theatre.*

The enlargement in 1855 had left one important part of the hospital unchanged. The original operating theatre on the third floor remained in use, and though not inconvenient in provision of light or in situa-

* Now Professor of Surgery in the University of Durham College of Medicine.

tion, it was too small for the growing needs of the surgical work. A new theatre was therefore built as an offshoot on the first floor, and the cost of this addition and of other alterations carried out at the same time, amounting to £2,500, was defrayed by Sir W. G. Armstrong.* The increasing claims of the surgical work of the hospital had previously led to an increase in the surgical staff. In 1869 four assistant surgeons were appointed, with a view to the relief of the senior members of the staff in the out-patient department, and in the attendance upon cases of accident and emergency.

Looking back over the quarter of a century from 1850 to 1875, the Governors could not fail to acknowledge that the charity had been nobly supported. At the beginning of the period the new wing had been built, and the alterations carried out, at an expenditure which was met with a liberality that won as much commendation as the transformation it was the means of producing. True, within a few years, the annual receipts fell off to a serious extent, so that the Committee in 1860 published a *Report* in which it was stated that in the seven years then elapsed,† there had been an average excess of annual expenditure

* For two interesting letters from Sir W. G. Armstrong with reference to these additions and alterations, see Appendix E.

† These years covered the period of the bank failures and great commercial depression.

over receipts from all sources of £68 a year. But if for the next ensuing seven years a similar statement had been given, it would have been of a different complexion. From 1861 to 1867 inclusive, the receipts from all sources exceeded the expenditure by an aggregate sum of £15,478. In the next seven years the balance remained in favour of the Infirmary, and in 1875 there was received from the estate of a wealthy coal owner, Mr. W. J. Hutchinson, a bequest of £25,000. When this magnificent addition to the funds had been invested, the capital account of the Infirmary, as stated in the *Report* for 1876, stood at £58,866. In 1853 it had been £14,408.

Such a windfall as that just referred to, the Governors had, of course, no power to foresee. But upon the statement for the whole period the comment seems permissible that, in dealing with the finances of an institution like the Infirmary, it is not wise to take too short views. Upon a deficiency for a year or two it is easy to fall into an apprehensive mood which may needlessly cripple the efficiency of the charity. It has happened again and again in the history of the Infirmary that such lean years have occurred in time of commercial depression, or when public interest in the institution has temporarily slackened. But the lean years have passed away and been succeeded by others that have more than redressed the balance.





Peregrine George Ellison.

From a Painting by Ellerby.

There is no series of years of any duration in its history that has not witnessed an expansion of its usefulness or that has not brought a development of its resources.

The name which, during this period, is especially associated with the government of the Infirmary, is that of Peregrine George Ellison. He was the son of the Rev. Nathaniel Ellison, reader of St. Andrew's, and was born in 1787. His name occurs in the list of members of the House Committee, published for the first time in the *Annual Report* for 1845, and it is more than probable that his membership is of still earlier date. Till his death in 1866, his association with the governing body was unbroken. He was its chairman during at least the latter part of that time; and no one has, throughout the history of the Infirmary, been more devoted to its interests, or exercised a more real authority in its affairs. Some years after his death his portrait was presented to the Governors by his grandson, Mr. W. G. Woods.

CHAPTER VI.

INTRODUCTION OF ANTISEPTIC SYSTEM.

RAVENSWORTH WARDS.

1875. The previous chapter closed with a reference to the satisfactory figure which the invested capital of the Infirmary had reached in 1875, as a result chiefly of the munificence of one benefactor. It must not be concluded that the hospital was therefore in a prosperous condition. It was, on the contrary, passing through a most serious crisis. The decade from 1868 to 1878 covers the period in its history on which those interested in its fortunes might be the least inclined to dwell with satisfaction. But, in point of fact, these few years not only included the date of its emancipation from the long-standing evils from which the Infirmary and all kindred institutions had hitherto suffered; they led up also to changes of great moment in its constitution and administration. These events and changes have determined its subsequent policy, and it is necessary that their history should be traced with sufficient candour, and in sufficient detail.

The crisis owed its origin to the awakening of both the professional and public mind to the continued

prevalence of hospital disease in the Infirmary. The first indication of this awakening was the representation made by the medical staff in 1868, that the nursing in the hospital was seriously deficient. In 1869 important changes had been determined upon. The Governors had sanctioned the building of a new operating theatre and kitchens, and several structural alterations in the house. The household staff and resident medical staff were increased, and an improved dietary for the patients was adopted. It has been already related that the cost of the new theatre and alterations was defrayed by the generosity of Sir William Armstrong. But it had been clearly seen that the changes affecting the administration would involve a serious increase in the annual outlay—and this anticipation was realised. The expenditure, which amounted to £7,119 in 1870, rose to £8,086 in 1873, and to £8,931 in 1875. A strenuous effort was made to meet this growing expenditure by an increase of income, and the effort had been partially successful. A new source of revenue was by this time established in the Hospital Sunday Fund, and the substantial yearly contribution received from the fund was a welcome and reliable addition to the Infirmary resources. Other and more special efforts were made. A highly successful ball in 1871, suggested and promoted by the senior house surgeon (Mr. F. Page), realised the substantial sum of £575. But in spite of all efforts and appeals, the income lagged sadly behind the expen-

*Increased
outlay.*

*Special
Finance
Committee.*

diture. The Committee deplored the necessity of supplementing the deficient income by withdrawals from the legacies, which fortunately came into the treasury during this period in quite average amount. To trace out the causes of the growing outlay, and to suggest means of adding to the income, a special Finance Committee was appointed. It certainly seemed that a rate of expenditure, which reached in 1876-7 the extraordinary figure of £6 15s. 6d. per patient, needed enquiring into. In due time the Finance Committee reported. In a trenchant and unsparing report they laid bare a sufficient array of negligences and abuses. In suggesting remedies, the report was equally explicit. The most important of the changes proposed were the appointment of a house steward, and the amalgamation of the House Committee and Medical Board. The disadvantages arising from the absence of one business head of the establishment were obvious. There had been want of co-ordination among the administrative officials, and of general supervision, which went far to explain the waste and extravagance which had undoubtedly been going on. The House Committee were disposed at once to act upon this recommendation, and a house steward was appointed. But the position was not satisfactorily filled till the appointment of a house governor in 1879.

The amalgamation of the House Committee and Medical Board did not take place till ten years later.

The existence of these two governing bodies, deliberating apart and communicating with each other through their secretaries, was the cause of much friction and misunderstanding. There had been irregularity in their attendance on the part of one or two members of the medical staff, but the effects of this and many minor points of difference were magnified and distorted by the unbusinesslike relationship in which the lay and professional elements stood to each other. When the fusion eventually took place all causes and occasions of discord vanished.

In the meantime the object, which had brought about the crisis, was being attained in a different way. The object had been to convert the Infirmary into a hospital where the treatment of patients, and especially their surgical treatment, could be carried out with the highest possible measure of success. All the changes, which had so strained the finances of the charity, had been steps in the right direction. Their success could have been only partial, without the introduction of the antiseptic system of surgery.

*The
antiseptic
system.*

It is not difficult to understand the principles of this system of treatment, which has wrought so wonderful a change in the hospitals throughout the world, and in none more conspicuously than the Newcastle Infirmary. It will have been gathered that hitherto surgeons were without precise knowledge as to the cause and mode of origin of those forms of disease

which were aptly called the plague of hospitals. Attempts to explain their nature, in the absence of knowledge of their intimate cause, were therefore only guesses, and attempts to prevent or remedy them were equally tentative and mostly unsuccessful. The genius of Professor Lister, inspired by Pasteur's work on the germ origin of fermentation, opened the secret. By patient investigation in the laboratory and in his hospital wards, he proved that the unhealthy conditions of wounds, which are known as septic, were due to the action of germs or micro-organisms. The practical problem, therefore, was to exclude these germs, or to destroy them by the use of agents which would not hurt the wound or delay its healing. Either mode of defending the wound can suffice; the foe is kept out or is killed. But as it has been found that all means of defence are needed against enemies so ubiquitous, the antiseptic system aims at accomplishing both objects, the exclusion and the killing of hostile organisms.

On the resignation of the senior house surgeon (Mr. F. Page), a successor (Dr. W. T. Beatson) was appointed, who had the good fortune to have served under Professor Lister in Edinburgh. He came instructed in all the details of Lister's work, and an enthusiastic disciple of the system. The surgeons of the Infirmary were ready to give the treatment an honest and hopeful trial, and to avail themselves of their house surgeon's

acquaintance with its application, in introducing it into their wards. The success of the treatment was assured *Its success.* from the first. In their *Report* for 1875, the Committee informed the Governors that "the health of the Infirmary is in a satisfactory state, there not being a single case of pyaemia in the house or other serious hospital disease." In 1876 the announcement could be made that "not a single case of pyaemia had occurred during the whole of the year that had just expired." A statement to the like effect appears annually in the reports for the next few years, and then it is dropped, when freedom from hospital disease became so much a matter of course as to call for no special comment. Year by year, as the treatment became perfected in details, the results of the surgical work in the Infirmary improved. It became the custom to publish an annual statement of the results in one important class of cases, in order to show what could be achieved, in an old and hitherto unhealthy hospital, by a faithful observance of antiseptic principles.*

The antiseptic treatment has had many results, *Results of the system.* which have powerfully influenced the history of the Infirmary. It has immensely widened the range of surgery, and as new operations have been introduced, the number of patients seeking admission into the wards has increased. The results obtained, also, have

* *Statistics of Amputations in the Newcastle Infirmary*, by Frederick Page.

steadily raised the reputation of the hospital, and the natural consequence of success has been an ever-increasing pressure on its resources.

In one particular alone the antiseptic system has disappointed the hopes of some of those who witnessed its introduction. It has proved a costly and not an economical method. In the early days, when the use of carbolic acid seemed the principal feature of the treatment, it was expected that the diminished use of the materials employed in the old methods would counterbalance the cost of the new. In the *Report* for 1876, in which some interesting information is given about the year's experience of the new treatment, this hopeful anticipation is expressed. In illustration, the saving upon linseed meal for poultices is set against the cost of the antiseptic dressings.* Apart from this question of relative cost, nothing could more forcibly bring home the evils of the discarded methods than to learn that in one year three tons of linseed meal had been used, mostly no doubt in poulticing wounds. No better hot-bed for the cultivation of infective material could have been devised.

But those who expected a saving in money were soon undeceived. Frequent changes in detail, a ceaseless striving after better results, involved a growing expense in material and appliances, and as time went

* In the year March 31st, 1875-6, £13 had been spent on linseed meal; in the previous year £60.

on the method became more and more a system of absolute cleanliness, a cleanliness so absolute that it required a special name and came to be designated as *surgical cleanliness*. This was merely the endeavour to carry out the second mode of defence, not the killing of the germs, but their exclusion and removal. More elaboration of detail followed and more trained hands to do the work. And, again, the antiseptic system has played its part in raising the general standard of hospital requirements, and in raising the standard has increased the cost.

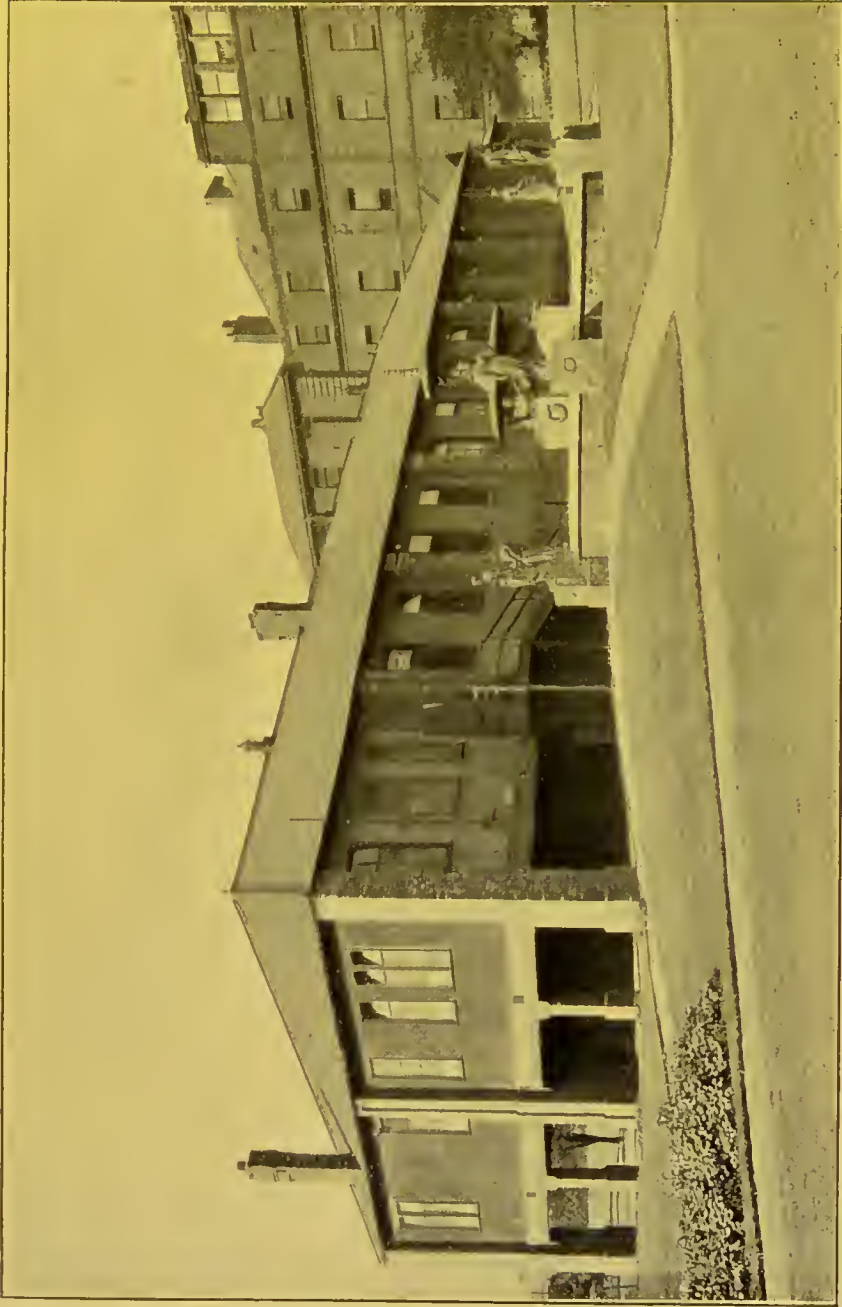
Of the two troubles which beset the Infirmary so acutely in the early seventies, the antiseptic system, therefore, cured only one. It made an end of the "inbred disease of hospitals," which in all previous epochs had been wasting lives. It aggravated the other troubles which arose from the difficulty of keeping expenditure within reasonable limits.

There was a third trouble—one which the Infirmary had again and again laboured under—which, also, the introduction of the antiseptic system aggravated. The increase of population in Newcastle and district would in any case have caused a pressure upon the hospital which its existing accommodation could not have met. But that something of the pressure, that actually occurred, was due to the great increase in the number of surgical cases that followed the introduction of antiseptics, is shown by the comparison of a few figures. The number of

in-patients treated and the number of operations performed will illustrate this point. In 1876 the number of in-patients was 1,630; in 1884, 2,578, that is, the in-patients had increased about 58 per cent. For the same years the numbers of operations were 297 and 908, that is, an increase from 1876 to 1884 of more than 200 per cent. In all departments, but especially in the surgical wards, where this disproportionate increase had occurred, it was seldom possible to admit other than urgent cases. Overcrowding to an alarming extent was the result; and soon the cry arose for an enlargement, or a new hospital. In the autumn of 1884, the question was seriously taken in hand; it had been again and again urged and had appeared in each report of the Committee for four years. A Special Committee, with

1885. Lord Ravensworth as chairman, was now appointed, to decide upon and carry out a scheme. The first proposal was to build an addition of not less than seventy beds, as an extension southward of the Dobson wing. The City Engineer, however, drew attention to the position of the Skinnerburn. It ran athwart the site of the proposed addition, and a secure foundation was impossible save at great cost. An out-shoot from the centre of the main block was advised, and this proposal was adopted. It was then resolved to build for 150 beds, and this resolution of the Special Committee was approved by the Governors, and was promptly met by several liberal promises of support. It was not, how-

Schemes for enlargement of hospital.



The Ravensworth Wards.



ever, approved by professional opinion in the hospital, and a unanimous communication from the consulting and acting staff led to the whole matter being referred again to the Governors. The staff deprecated an enlargement of the present building, but in view of the urgent need for temporary provision, advised that this should be supplied without delay, and that a new hospital should be built on another site. The view of the medical officers prevailed, and at a conference on January 16th, 1885, it was finally determined to build a temporary block for 50 beds as an out-shoot from the main building. The new wards were opened for patients in the ensuing October by the Earl of Ravensworth, after whom they were named. The addition was intended to last for five years, while a new hospital was being built. It has lasted for more than twenty, and has served throughout that time as an example of inexpensive, and yet efficient, hospital construction. The total cost of the building was £2,260, of which the ever-ready generosity of Sir William Armstrong contributed £1,000.

*Ravensworth
Wards.*

The opening of the Ravensworth Wards greatly relieved the pressure in the hospital. They were occupied by male patients, the withdrawal of whom from the main building gave space for fifteen additional female patients, for three suitable wards to constitute a children's department, and for a small addition to the nurses' accommodation. The overcrowding was

for the time allayed. The Infirmary had now proper accommodation for 270 patients.

*Embarrassed
finances.*

The years which followed this last addition to the old Infirmary brought many important changes. These owed their origin to that most potent factor in its policy—its embarrassed finances. Notwithstanding the increase in the number of patients, the expenditure for three consecutive years after the opening of the Ravensworth Wards showed a small but progressive diminution. The revenue also showed a tendency in the right direction. But it was a very languid tendency; the increase was small; and expenditure and income, though approaching, were yet far from effecting a meeting. The very year after the opening of the new wards, the *Report* had to tell of the withdrawal from capital of £7,000, in order to cover the year's deficit and to diminish the accumulated debt to the treasurer. And still there was a debt due to the Treasurer of £2,450. Though it seemed to stultify their action in building the Ravensworth Wards, it can hardly excite wonder that the Committee recommended the Governors to restrict the admissions to 200. A public announcement of this determination was to be accompanied by the assurance, that if the public supplied the necessary funds, the Governors would only be too glad to place the entire accommodation of the Infirmary at their disposal. This resolution came before the Governors in Quarterly Court, for their sanction; but, in-

stead, another expedient was adopted. The chairman of the House Committee, the Rev. Dr. Bruce, could better tolerate an embarrassed financial position than any restriction upon the usefulness of the charity. He had complete confidence that the recent management could bear the closest scrutiny, and his own enthusiastic appreciation of the good work done by the Infirmary rendered him incapable of believing that a well-instructed public could withhold the necessary funds. He therefore proposed that a searching inquiry should be made by an independent authority, nominating for that purpose a Special Committee, whose names guaranteed their impartiality. Only two members of this Committee were at the time members of the House Committee.*

*Special
Committee.*

After a thorough and prolonged investigation, the Special Committee reported "that on the whole the Infirmary had been well managed according to the rules and regulations that have been in force and that there has been no wilful waste or wanton extravagance." As regards the rules and regulations, the Committee proposed changes of the highest importance, which amounted to a remodelling of the constitution. Some of their proposals, in conference with the House Committee and Medical Board, were dropped, but the more important were adopted and carried out by the Gover-

* For list of this committee and of the House Committee who were associated with the Special Committee see Appendix G.

nors. The relation in which the Infirmary stood to the public was thereby radically altered, and in some important points the interior government was put upon a new basis.

*Proposals
adopted.*

1. The letter system was abolished, and the hospital made free. The conviction had for some time been growing that the system of admission by letter had broken down, and was now in many ways a hindrance to the prosperity of the hospital. It was financially unsound, because the cost per patient far exceeded the money value of the letter which admitted him. It was an obstacle in the way of urgent and deserving cases obtaining prompt admission, and it was a discouragement to contributors of small sums, whose subscriptions purchased no privilege. It was this last consideration which weighed against the continuance of the system. The Governors of the Sunderland Infirmary, in making their hospital free some years previously, had made a very successful appeal to the workmen of their district for regular fixed contributions. The workmen in Sunderland were now contributing upwards of £2,000 annually, and in contemplating a similar appeal in Newcastle, it was seen that it could not be made if the privilege system were maintained.

2. The House Committee and Medical Board were amalgamated. This obviously needed reform had been recommended in the report of the Special Finance Committee of 1877. At that time the Infirmary was a house

divided against itself, and it is certain that the discords that then jarred the government of the hospital would not have existed if the government had been single instead of dual.

3. The constitution of the House Committee was changed. Three workmen members already had seats at the Board, but if the intended appeal met with the expected success, a larger representation on the House Committee must be given to the workmen Governors. It was eventually arranged that all works, which subscribed £10 and upwards, should appoint a Governor for every £10 subscribed, and that works subscribing less than £10 might coalesce in the appointing of a Governor. The Governors so constituted were to elect nine of their own number to be members of the House Committee. With these, and the members of the medical staff, the new House Committee numbered thirty-two members.

4. The mode of election of the honorary officers was changed. Hitherto election to the post of honorary physician or surgeon was by the whole body of the Governors. With so large a constituency, success was believed to depend on the skill and assiduity in canvassing, exercised by the candidate and his friends, rather than on the deliberate judgment of the voters upon the candidate's fitness. The task of choosing was now to be entrusted to a Selection Committee, sufficiently large and representative, whose choice it was

anticipated would be determined solely by the personal and professional merits of the applicants.

5. The out-patient and casual departments were remodelled. The out-patients were to consist of those who had been in-patients and still needed supervision, and the casuals were to be restricted to urgent cases requiring immediate relief. The pruning of these departments was due to the opinion that they had reached unreasonable dimensions and were largely abused. But the opinion was not unanimous. The step was regretted by some as being a serious limitation of the usefulness of the hospital, more especially as it involved the cessation of the special departments for the diseases of women, and of the skin and throat and ear. In 1890 the step was retraced and all the departments re-established.

6. Other changes concerned the status of the resident medical staff. This was to consist only of fully qualified members who replaced the non-qualified medical clerks and surgical assistants. There were to be two house physicians and four house surgeons.

The most important reforms, and those which have most influenced the subsequent course of events in the Infirmary, were the amalgamation of the House Committee and Medical Board, and the abolition of admission by letters. The latter measure did not, as was feared by some, alienate support to any extent, by the withdrawal of subscriptions. It has, on the other hand,

greatly strengthened the position of the hospital, and it enabled the committee to obtain the organised support of the workmen. It suggested also another appeal. The fact that the Infirmary was being made a free hospital in the Jubilee year of Her Majesty Queen Victoria, put it into the minds of the Committee to seek the Queen's permission to adopt the title Royal in the name of the Institution. Her Majesty was pleased to grant this request, and to command that the Infirmary be styled, in future, "The Royal Infirmary for the Counties of Newcastle-upon-Tyne, Northumberland and Durham."

*Royal
Infirmary.*

CHAPTER VII.

THE ROYAL INFIRMARY.

1887. The Special Committee in their report raised a question, which has been, and is, one of the problems of hospital administration. It has always been recognised that in every similar hospital to the Newcastle Infirmary, individuals are admitted to the full benefit of the charity, who are able to pay in whole or in part for their treatment. To what extent this happens it is difficult, or perhaps impossible, to determine. The expedient usually suggested for meeting the contingency is the establishment of paying wards in which, with greater privacy and comfort than in the general wards, patients are received, who are in a position to pay the whole or part of the cost of their maintenance and treatment. This suggestion, which the Special Committee embodied in their report, the Governors did not adopt. It was seen that the Infirmary was not favourably circumstanced for making trial of this expedient. Its overcrowded wards were admittedly insufficient for the wants of the district, even if none but the proper applicants sought admission. To set apart any portion of the hospital for such privileged

Payments by patients.

use could only result in robbing the poor of what the general charity had provided for them. The question was postponed to a more favourable opportunity, care being promised in the meantime to prevent abuse, and to obtain from all patients who were in a position to give, some contribution to the funds. In the out-patient and casual department trial had already been made of the exaction of a small payment from the patients. In June, 1886, attention was drawn to the exuberant growth of the numbers in this department, and apparently with a view of checking abuse from numbers alone, a small charge of 3d. was imposed for each visit. The effect in reducing the numbers was very striking; but it was the opinion of the officers in attendance that the better class of patients continued to come, while the really necessitous stayed away. When the casual department was abolished in consequence of the recommendation of the Special Committee the experiment ceased.

As soon as the hospital was made free, the workmen took up the cause of its support with enthusiasm. Before the end of the year upwards of £1,500 had been paid in; and the full year's contribution in 1898 was £2,503. There has since been no slackening in their efforts. Scarcely a year has passed that has not seen an increase in the amount of their subscriptions, which reached in 1900 the very notable sum of £4,907.* This

*The
workmen's
support.*

* In 1905 the subscriptions from the workmen amounted to £5,647.

liberal gift in money, which has come to be one of the most reliable and certainly the most progressively valuable of the hospital assets, is not the only benefit which has arisen from the movement. The keen and for the most part well-informed interest, which the workmen Governors and members of Committee take in the affairs of the Infirmary, has proved a wholesome impulse in its life. Those recurring periods of torpor, which overtake all institutions, and have been not unknown in the history of the Infirmary, will be less frequent and more brief for the vigilance of those who have the most direct personal interest in its welfare. And in the case of workmen members of the governing body, attendance is a delegated duty, which is certain to be regularly fulfilled. Their share in the business of the Institution is thus free from the besetting weakness of government by committee—a want of continuity, arising from the interrupted or infrequent attendance of individual members. Three more workmen Governors were added to the House Committee in 1895, making their number twelve in a House Committee of thirty-seven.

*Hospital
Sunday
Fund.*

The contribution from the Hospital Sunday Fund suffered a much regretted diminution in consequence of the abolition of the letter system of admission. The amount derived from this source had hitherto consisted of two portions, one a free gift, and the other paid in exchange for letters. The latter portion was

discontinued. In place of it, after a time, it was agreed that the Infirmary should receive from the Fund (before any division was made of the free gifts) a hundred pounds for every thousand collected.

The list of annual subscribers, or the aggregate amount of their subscriptions, was but little affected by the change of system. There was no falling off in consequence; neither was there any material increase in response to the reiterated appeal for a wider and more liberal support, in keeping with the growing demands of the community on the hospital. It is a striking feature in the history of the Infirmary that the number of its regular supporters has shown so little tendency to keep pace with the growth of population.* The unfortunate but inevitable result of this irresponsive attitude has been that the Infirmary has largely depended for the continuance of its work on the immediate use of benefactions and bequests. This dependence for immediate wants on "the dead hand" has been the unfortunate experience of no special period. Save at the very beginning, there has been no series of years of any length during which legacies have not been

*Annual
subscribers.*

* This is a very serious side of Infirmary finances. The amount from annual subscribers stood still for thirty years, as shown by the following figures:—

Year.					Annual Subscription.
1870	...	...	...	...	£3,191
1880	...	...	...	...	£2,881
1890	...	...	...	...	£3,009
1900	...	...	...	...	£3,158

largely encroached upon, to rectify the discrepancies between annual expenditure and annual receipts.

1875-1900.

There has been no period in the history of the Infirmary during which these discrepancies have been more glaring than throughout the quarter of a century now under review. Happily, the munificence of the bequests which were received was equally conspicuous. Three legacies of £10,000 each and many of smaller amount made up a grand total of £84,433. Of that amount upwards of £57,000 was spent in the twenty-five years in making good the deficits, and only £26,800 added to the reserve fund. Summing up a review of a similar position in the affairs of the Infirmary in 1869, Sir William Armstrong expressed an opinion which will be accepted as equally applicable to the facts now related. "The upshot," he thought, "came to this, that the Institution had been most nobly, most magnificently supported by legacies and benefactions, but shabbily supported by subscriptions." No one was so fully entitled as the speaker to give an opinion on the subject. His own liberality to the Infirmary was continuous. Besides his annual subscription of £50, there was paid into the Infirmary account year by year a sum usually from £80 to £100, which had been received for admissions to Jesmond Dene, and which only ceased when that beautiful pleasure ground was fully handed over to the city and became free to the public. Repeating his generosity in defraying the entire cost of the

additions in 1872, his donation of £1,000 was nearly half the amount spent in building the Ravensworth Ward. His last special donation was the sum of £2,000 paid out of the estate of Lady Armstrong in 1893. But besides money, he had given time and thought and wise counsel to the affairs of the Infirmary. In the crisis of 1868-69, and in the remodelling of the constitution in 1887, his help was invaluable.

Of the many benefactors of the Infirmary in this period who gave both work and money, it is impossible to record all, and may be invidious to select. One or two may be noted, rather as examples of different ways in which the Infirmary has been helped. A cottage on the Gosforth estate was placed at the disposal of the Committee by Mr. T. E. Smith, to be used as a convalescent home for surgical patients. It remained available for that purpose till the sale of the estate in 1880. Some extensive improvements were called for in the kitchen and adjacent parts of the Infirmary in 1880, and the supervision of the work was undertaken by Mr. Henry Watson and the newly-appointed house governor, Mr. Redmayne. Under their direction the whole basement storey of the Infirmary was put in order; and by their exertions, a fund was raised to defray the cost, amounting to £700, by subscription among a few friends of the Institution. In 1891, when the indebtedness of the Infirmary to its treasurer had reached a portentous figure, a "special fund," set on

*Convalescent
cottage.*

*Special
funds.*

*Chaplaincy
Fund.*

foot by Mr. Charles Perkins to aid in reducing the heavy balance, in a few days and among a few contributors, realised a sum of £711. An important service was rendered in 1883 by the completion of the Infirmary Chaplaincy Fund. The original provision for the payment of a chaplain was very small. Twenty pounds of the interest on Sir Walter Blackett's benefaction of £1,000 (invested in the Ponteland Turnpike Road Trust) was ordered to be paid annually to the chaplain. The salary of the chaplain remained £20 till 1859, the post being always held by a clergyman holding some other appointment. In that year, Mrs. Tulloch endowed the chaplaincy with an additional £100 a year, to be increased at her death to £130. On her death it was found that, owing to a flaw in the will, the intentions of the testatrix could not be fully carried out. The amount, which the executors could legally pay over for the purpose, fell short by a sum of £1,832 of that required to yield the full salary of £130. For some years the deficiency was made up by a private subscription; but in 1883 a capital sum was raised by the exertion of the solicitor to the Tulloch trustees (Mr. Joseph A. Philipson), which completed the provision intended, and secured the payment of the full stipend. The special

*Endowment
of beds.*

endowment of beds as a means of increasing the reserve fund of the hospital was systematically entered upon at a recent date. A donation of £1,000 or upwards at one time or by instalments within a period of four years,

or a legacy of like amount, will endow a bed which shall bear such name as the donor or testator may direct: a donation or legacy of £500 in like manner will endow a child's cot. Nine beds have in this way been founded and named since the regulation was adopted in 1900.

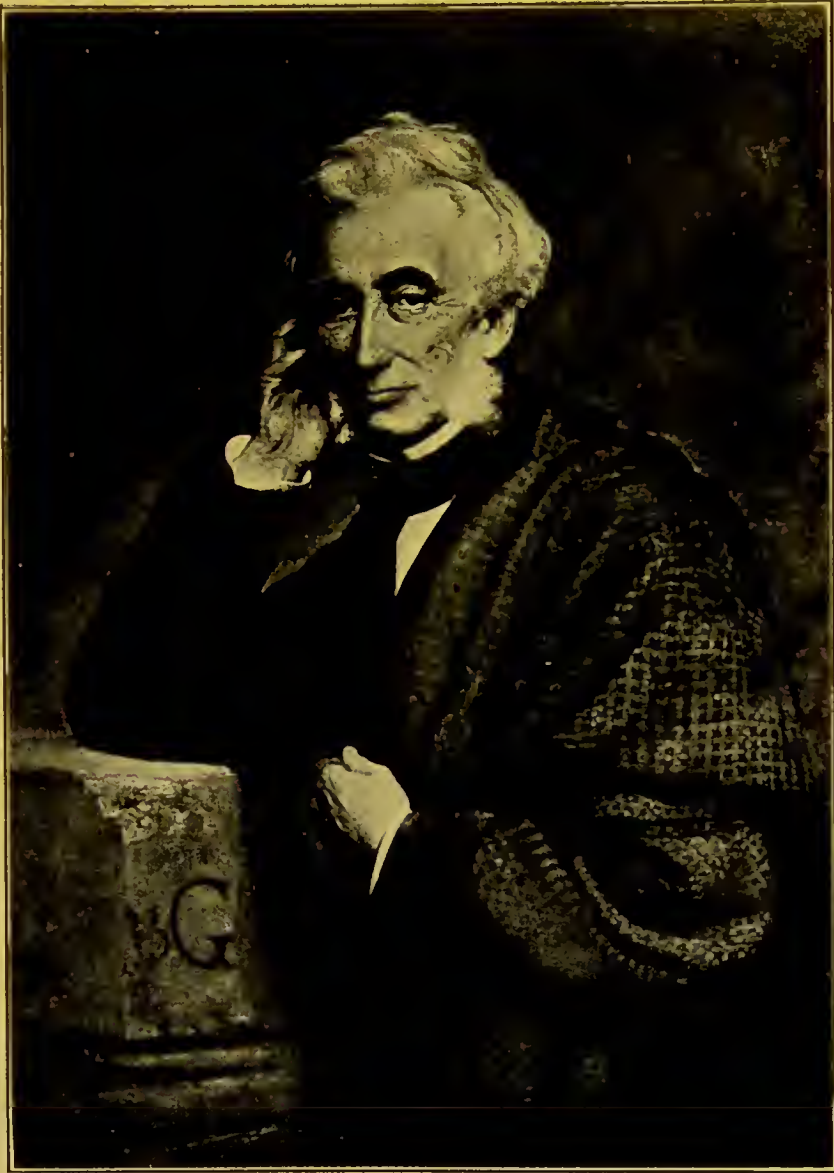
It has been a happy circumstance that during the last quarter of a century those who have had to find the means of carrying on the work have found encouragement in the success with which, notwithstanding all difficulties, it has been attended. The relief to the pressure on the accommodation afforded by the building of the Ravensworth Ward was of short duration. In the last decade of the century the number of in-patients admitted increased from 3,328 in 1890, to 4,258 in 1900; the operations from 1,021 to 2,642. Such an increase was rendered possible only by overcrowding and by shortening, as far as the limits of safety would allow, the length of time the patients remained in the wards. The average length of stay of patients in the house diminished from 26·5 days in 1890, to 22·63 days in 1900. Such overcrowding and early discharge of patients, again, were only possible on account of the rapidity of healing after operations, and the immunity from hospital disease, conferred by the antiseptic system.

*Increase in
number of
patients.*

One of the changes, which followed the re-casting of the rules in 1887, was the appointment by the House Committee of a chairman for the year, instead of, as

*Chairman,
Dr. Bruce.*

hitherto, at each meeting nominating one of their number to preside. Dr. J. Collingwood Bruce was the first chairman, with Ald. W. D. Stephens as vice-chairman. Dr. Bruce had been a member of the Committee since 1869, and he had taken a very special interest in the business of the hospital and in the welfare of the patients. Distinguished everywhere as an antiquary and historian, in his own town it was the philanthropist that came most into prominence. Dr. Bruce's form of philanthropy was not of the kind that satisfied itself with so many stated attendances at committee meetings; he came into close and sympathetic touch with the objects of his service. The institution of a singing band, who attended weekly at the Infirmary, under his guidance, to distribute flowers and sing in the wards, showed his care for the happiness of the inmates. After he became chairman he undertook the writing of the *Annual Reports*. These reveal the same spirit. They are full of sympathy with suffering, and dwell with pride on the successful work of the hospital in its relief. The financial straits of the institution are stated, but in no tone of despondency; they never so much as suggest to his mind the alternative of restricting the work. Attending the Infirmary was, as he anticipated, the last work he relinquished, and the writing of the *Annual Report* for 1891 was the last service he accomplished on its behalf.



J. Collingwood Bruce.

From a Painting by Rudolph Lehmann.



Dr. Bruce was succeeded in the chairmanship of the House Committee by Ald. W. D. Stephens; and Dr. G. H. Philipson, senior physician to the Infirmary, became vice-chairman.*

One of the most distressing defects of the overcrowded Infirmary, to which the anxious attention of the Committee was given at this time, was the poor accommodation provided for the nursing staff. It was altogether unworthy, and fell lamentably short of what was due in comfort and healthfulness to those whose service in the hospital was so essential and so arduous. The capacity of the house was strained to the utmost, and as the number of nurses increased in proportion to the increasing work, it was evident that accommodation must be found outside the Infirmary. A house was taken in Wentworth Place, and as in course of a few years it proved too scanty a relief to the lodging room in the Infirmary, it was vacated, and three contiguous houses in Ravensworth Terrace were bought and converted into a nurses' home. This provided lodging room for thirty nurses, in apartments which were furnished free of cost to the Infirmary by the Mayoress (Mrs. Albert Lord) and a committee of ladies.

Accommodation for nurses.

1896.

* In recognition of his eminent services to the Infirmary, Dr. Philipson received the honour of knighthood in 1900.

CHAPTER VIII.

THE INFIRMARY AS A SCHOOL OF PRACTICAL MEDICINE
AND SURGERY.

This sketch of the history of the Infirmary would be incomplete without some reference to the part it has played as a school of medical training. The different phases, through which the history of the Infirmary has been traced, have their counterpart in the stages which have marked the progress of medical education in the past 150 years. When the Infirmary was founded, it so happened that an important change had recently been brought about in the status of the surgical profession. Rather, perhaps, the first step had been taken towards the conversion of the craft of surgery into a profession. The surgeons in the City of London had, by Act of Parliament, in 1745, been separated from their quondam associates, the barbers, and had themselves been formed into a distinct Company.* In the year 1751, and within a month of the date when the foundation stone of the Infirmary was laid in Newcastle, the new company in London was opening their newly built theatre, or hall, in the Old

*Craft of
Surgery.*

* *The Craft of Surgery*, by J. Flint Smith, p. 269.



Thomas Emerson Headlam.

From a Painting by T. Carrick.



Bailey.* How far this change in London, which had been accomplished by the determination of the surgeons at some considerable sacrifice of possessions, affected their brethren in the country it is not easy to ascertain. There existed a Company of Barber-Surgeons in New-castle who, curiously enough, were incorporated also with the Chandlers. Whether the first surgeons of the Infirmary were members of this Company or not, we do not know. No mention is made in the early Infirmary records of the surgeons having apprentices, though it is nearly certain that they had, and that the apprentices were free of the practice of the hospital. But the Infirmary itself had apprentices bound to the house apothecary, or house-surgeon apothecary, who received the fees. In 1767, however, a resolution was adopted that the fees should be the property of the Infirmary, and this rule continued in force for seven years. Then the Governors repented them of their stinginess, and the apprentice fees reverted to the house apothecary. This meagre notice, with regard to fees, is all that is to be gleaned from the minute books about those who were receiving their training in the Infirmary in the eighteenth century.

Barber-Surgeons.

In the *Book of Statutes and Rules of 1801*, issued 1801. when the first addition to the Infirmary was being built, there are explicit regulations as to the taking of

* *The Craft of Surgery*, by J. Flint Smith, p. 274.

Pupils and apprentices.

pupils and apprentices. The physicians had liberty to take pupils, to be instructed in physic, and to receive from them "a satisfactory gratuity." The pupils were not suffered to prescribe. With a difference in the wording which is significant, the surgeons were "allowed to have pupils and apprentices to attend the Infirmary" and to "take money for the improving of such pupils or apprentices." It was further enjoined "that neither pupils nor apprentices shall attempt, under pain of immediate expulsion, to perform any operation, except bleeding, making a seton, or cutting an issue, not even these operations, unless by order of one of the surgeons: and that they shall not presume to dress or take off any dressings unless one of the surgeons be present, or by his direction." In the taking of apprentices, articulated to the Infirmary, the greatest care seems to have been exercised with regard to their suitability. The name of an intended apprentice was entered in the minute book by the House Committee, at least two months before he was articulated, to give time for enquiry. If so far approved he was not articulated till he had resided in the Infirmary for three months, when if all parties still approved, he was bound at his own expense to the house surgeon and apothecary for the time being, for a term of not less than five years. The apprentice fee was one hundred and twenty guineas, one-half of which was paid to the house apothecary, the other half appropriated to the purchase



Sir John Fife.

From a Painting by James Andrews.



of books for the library. No information is available as to any systematic instruction or lectures given to the pupils and apprentices. Its absence may be almost taken for granted, though the education even of the surgeon apothecaries was growing more liberal. It is interesting, that the formulating of these rules for the pupils in the Newcastle Infirmary nearly coincided with the conversion, in 1800, of the Surgeons' Company into the Royal College of Surgeons in London.*

The statutes and rules of 1801 bring out emphatically the difference in status at that time between the physicians and surgeons. Every candidate for the office of physician was required to produce a certificate of his degree or his diploma—no mention is made of any qualification or diploma exacted from the surgeons. Probably the same rule applied to them, which regulated the appointment of the house surgeon and apothecary, who was required "to leave with the Committee testimonials of his having studied medicine, anatomy and surgery, and of his being acquainted with the general mode of hospital practice." A further stage was reached in 1838, when it became a requirement that 1838. the house surgeon and apothecary should present a diploma from a College of Surgeons, and a licence from the Society of Apothecaries in London. His salary was increased to £100, and he relinquished "all

* *The Craft of Surgery*, by J. F. Smith, p. 296.

fees and perquisites hitherto received by him on account of apprentices." The number of apprentices was henceforth not to exceed two; their fees became again the property of the hospital, one-half being appropriated as before to the purchase of books.*

*Medical
School.*

When the School of Medicine was set on foot in 1834, the career of the Infirmary as a teaching hospital began. None of the five practitioners† who, in a tentative way, made a beginning of medical instruction in Newcastle, was at the time on the staff of the Infirmary, and the modest number of their students was at first only eight or nine. But the number grew—it was twenty-five in the third session—and one of the lecturers, Mr. (afterwards Sir John) Fife, became one of the surgeons of the Infirmary a few years later. In course of time the Medical School became the College of Medicine, and this, when in 1851 it entered into association with the University of Durham, became the medical faculty of the University. As the College prospered and attracted more students, its connection with, indeed its dependence upon, the Infirmary, grew more intimate. The lecturers of the College were for the most part the physicians and surgeons of the Infirmary, and the

* The last apprentice to be articled to the House Surgeon (1854) was William Christopher Arnison, afterwards one of the Honorary Surgeons to the Infirmary (1867-1897).

† They were George Fife, Samuel Knott, John Fife, Alexander Fraser, Henry Glassford Potter. The last-named became one of the Surgeons of the Infirmary in 1844.



Dennis Embleton.

From a Photograph by Ruddock, Limited.



Infirmary was the school of practical instruction and experience for the students.

A prominent figure through two generations of Newcastle life, Dr. T. E. Headlam, may be said to have bridged over the interval between the two systems of medical education, and to have belonged to both. When he studied medicine in Edinburgh, Brougham and Jeffrey were students of the University. He succeeded Clark as physician in the Infirmary in 1805, and held office till 1841. It is not probable that he took much part in systematic instruction; it was not the custom of his day. But he became the dignified President of the College of Medicine in 1851, and continued to fill that position during the latter years of his venerable but vigorous age. For many years he was the leading physician in Newcastle, and was as prominent in political and municipal, as in professional life.

*Prominent
teachers.*

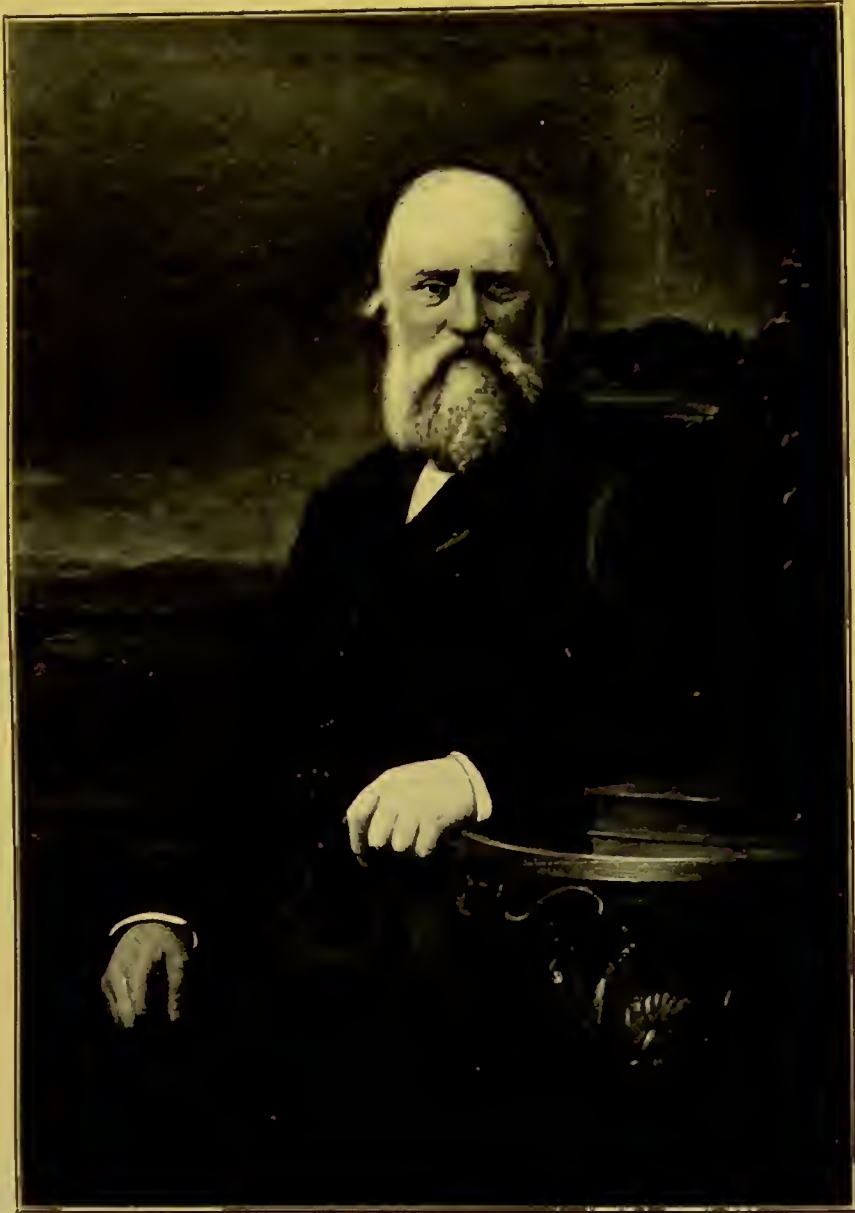
The most active and distinguished among the earlier teachers, and as a surgeon in the Infirmary, was Sir John Fife. Like Headlam, he took a leading part in public affairs. Twice Mayor of the town, he was knighted for his services during the Chartist disturbances, and at a later period he was a leader of the Volunteer movement. He was the last among the prominent professional men of Newcastle, who was able to devote time and talent to the public interests of his fellow townsmen.

Another link between the medical school, in its day

of small things, and the Infirmary, was Dr. Dennis Embleton. In a robust age, he was a strong personality. Distinguished as a naturalist, and as a physician, he was equally a man of consequence in purely scientific and medical circles. His habit of giving strong expression to strong views made him a leader in the dissensions which split the Medical School before it had been many years in existence, and in the troubles which, for a time, estranged the medical staff and the House Committee of the Infirmary. He held office in the Infirmary as a physician for exactly a quarter of a century.

The scholarly and courteous physician, Dr. Edward Charlton, is one of the best remembered of the past teachers in the wards and lecture room of the Infirmary. A member of an old North Tyne family, he was learned in all north-country lore. In this, and in Scandinavian literature, which was his favourite study, his polished address and style made him a popular exponent. At his death, in 1874, his friends and old students founded a scholarship to perpetuate his memory, and placed his portrait in the Library of the Royal Infirmary.

No teacher in the Royal Infirmary has made a deeper and more lasting impression than Dr. George Yeoman Heath. A man of surgical genius, he had gifts of personality which have made his teaching to be vividly remembered. He was for many years the leading surgeon in Newcastle and was equally distinguished



Edward Charlton.

From a Painting by Jones Barker.



for his skill of hand, and for the force and eloquence of his style as a lecturer. He retired from the Infirmary in 1880, after a service of twenty-six years. He had amassed a fortune by his professional success, and at his death he left generous bequests to both institutions—the College of Medicine and the Royal Infirmary—whose reputation he had done so much to create.

Under these, and teachers of no less zeal and ability who have succeeded them, the Royal Infirmary as a centre of medical education has steadily grown in importance. The almost unequalled opportunities it affords for practical training, reinforcing the position of the College of Medicine as an integral part of the University of Durham, have attracted students from all parts of the kingdom. After the re-organisation of the College of Medicine in the early fifties, the number of students quickly increased, so that in the Infirmary *Report* for 1856, it was stated that “sixty students have this year witnessed the practice of the hospital and have had the benefit of the clinical teaching of its honorary officers, by which means the facilities for medical education have been increased, and the interests of the community at large have been indirectly promoted.”

It may be claimed that while the Infirmary has benefited medical education, its position as a teaching centre has also benefited the Infirmary. The students in their posts of dressers and clinical clerks, contribute in a material degree to the carrying on of the

work of the hospital. Later, as house physicians and house surgeons, they are charged with duties of an arduous and responsible character, and in the performance of these, while furthering their own education, they do an essential service to the Institution. But perhaps the chief advantage, which the educational part of its work confers on the Infirmary, lies in its influence in promoting a high standard of efficiency. It favours the wholesome publicity in which the work is carried on, and encourages a stimulating self-criticism in all its officials. And in its general effect, it is no small gain to the community, in which it is placed, that the chief hospital should also be a school of practical training in medicine and surgery.



George Yeoman Heath.

From a Painting by C. Joy.



CHAPTER IX.

CLOSING YEARS OF THE OLD INFIRMARY.

THE ROYAL VICTORIA INFIRMARY.

The closing years of the old Infirmary have been so largely occupied with the endeavour to provide a successor, that their history is virtually a record of these long-continued efforts. There is no new feature in the work of the hospital; its increase and its success were already accustomed characteristics. If the marvel had not grown so familiar, it would have seemed well-nigh impossible that so great an amount of work, especially on the surgical side, could have been accomplished under such untoward conditions with so great success. The marvel is a tribute, more eloquent than any words, to the boon which Lister has conferred on mankind. In the case of the Newcastle Infirmary it justified, or at least condoned, the overcrowding of its wards, and while a scrupulous adherence to the antiseptic or aseptic method permitted a larger admission of patients at one time, it also made it possible, though not always advisable, to shorten the duration

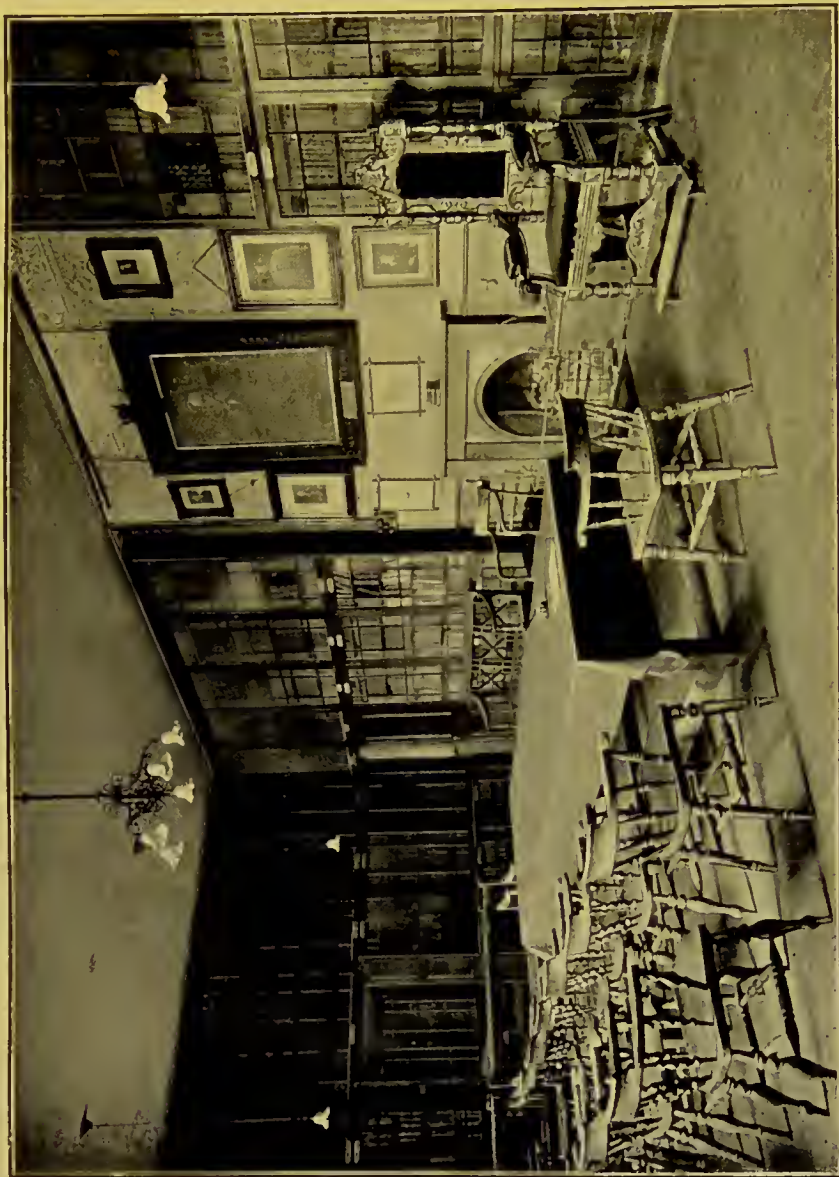
*Increase and
success of the
work.*

of their stay. In this manner, with no addition to the proper accommodation of the hospital, the annual number of admissions has shown no arrest in its progressive increase, and the character of the work, as told by the number of operations performed, has grown in severity. These aspects of the work come out in relief when the contents of *Annual Reports*, separated by a few years' interval, are contrasted. In 1896 the number of in-patients admitted was 4,043, their average stay 24.69 days, and the number of operations 2,043. In that year the *Report* makes the following comment: "Those who are in a position to form an opinion declare that their curtailed stay in the house cannot be attributed to a more rapid recovery of the inmates, but rather to the sad necessity of sending out patients prematurely in order to find beds for more pressing cases, a necessity never more acutely felt than at the present moment." That ten years later the necessity was still more acutely felt the following figures show. In 1905 the total admissions were 4,633, their average stay 20.91 days, and the number of operations performed 3,699. To complete the picture, and to show that this regrettable but inevitable system of hurrying and overcrowding was condoned by its results, a quotation may be given from the surgical report of the same year. "The surgical work of the Infirmary steadily increases, and in spite of the drawbacks attending an old and overcrowded hospital, the results are





The Board Room.



The Library.



remarkably good—as good as those of the most modern and extravagantly equipped institutions,” and the general statement is reinforced by a specific instance—“ovariotomy for the removal of cystic tumours of the ovary was performed in fifty-seven cases and all these patients recovered.”

What could be done for the comfort of the patients in this overcrowded state of the hospital was not neglected; and the gratification springing from the carrying out of good work is naturally enhanced by difficulties overcome. But there was one drawback which offered no alleviation of this sort, and which continued to be an additional incentive to the Governors in their urgent desire to undertake the building of a new hospital. The difficulty of finding accommodation for an increasing staff of nurses has been already referred to; and the difficulty had been only partially met by the makeshift expedient of converting some houses, at a distance from the hospital, into a Nurses' Home. Another house in still another part had to be added in 1901; and when, later on, nurses were sent from time to time to the Young Women's Christian Association, there came to be, including the Infirmary itself, four different localities, somewhat distantly part, in which the nurses of the Infirmary were lodged. The trouble did not end there, for in the general opinion of the Committee, the character of the nurses' quarters in the Infirmary continued to be, in spite of every

Accommodation for nurses.

effort to improve it, a reproach to the hospital and to the community in which it was tolerated.

*Proposals for
building a
new hospital.*

The necessity of building a new hospital had been again and again discussed by the Governors and medical staff, both before and after the erection of the Ravensworth Wards. In connection with the provision of fitting accommodation for nurses, the question was revived in 1888, when it was proposed to take the first step by building a Nurses' Home in the Infirmary garden. This proposal met with little support and was withdrawn. Revived again in the autumn of 1891, the urgent need of a new Infirmary was persistently kept before the notice of the public and the representatives of the public in the City Council, till in the end these persevering efforts were crowned with success. Proposal after proposal was advanced, only to be met with an apparently obdurate fate. It would be futile now to record these proposals at length or chronologically. They may be summarised as briefly as possible. Starting with the principle that the prime necessity was a new hospital, the Governors proposed, or had proposed to them, these schemes: (1) To rebuild on the present site without enlargement, or (2) with the addition of the road to the north or a still larger portion from the adjacent Cattle Market; (3) to build on a site on the Leazes adjoining Barrack Road; (4) other more distant sites such as Fenham, the Recreation Ground, etc. The first three schemes were seriously

*The site
difficulty.*



The Percy Ward.



Operating Theatre.



debated. The first was finally abandoned as impracticable after much consideration and the obtaining of expert guidance. To obtain the road to the north of the Infirmary or a portion of the Cattle Market, or the Leazes site, the way lay through an application to the City Council, and the Council was for a time besieged by deputations from the Governors. It is probable that the Council, wearied of these repeated applications, came to look upon the Infirmary as an importunate suitor whom they were willing, but had not the power, to help; for the Council was restrained in their desire to benefit the Institution by their belief that the public welfare required them to resist any encroachment on the Cattle Market, or any inroad on the inviolability of the Leazes or Town Moor.

The question of site being thus unsettled, no attempt had hitherto been made to obtain the necessary funds. After the death of Dr. Bruce in 1892, the wish to raise a fitting memorial of his connection with the Infirmary led to the proposal to at once commence the rebuilding of the hospital by the erection of a Bruce memorial wing. But the public mind was not yet prepared, and the scheme was allowed to drop.

After five years' debate, matters had not advanced beyond this point in the autumn of 1896. The whole strength of the debate had been expended on the site question; it turned out that the key to unlock the position was the golden key, and that a happy inspira-

tion, which provided the means of building, led in the end to the solution of the difficulty of where to build.

*Queen
Victoria's
Diamond
Jubilee.*

Throughout 1896 the public mind was much turned towards devising schemes whereby the approaching Diamond Jubilee of Queen Victoria's reign could be appropriately commemorated. By a happy intuition, the then Mayor of the city, Mr. (now Sir Riley) Lord, offered the suggestion to his fellow citizens that no better memorial could be devised than the building of a new Infirmary for the Sick and Lame Poor. He commended his suggestion by calling to mind how largely the unique place which the Queen filled in the hearts of her people was due to the warmth and reality of her womanly sympathy for the suffering and afflicted. Such a plea for such an occasion could scarcely have failed of success. It was taken up with enthusiasm, and at a great meeting held in the Council Chamber on the 7th October, 1896, resolutions were passed and a subscription list announced amounting to £38,700. It was at first the intention of the Mayor to raise the sum of £60,000, or a thousand pounds for every year of the Queen's reign. But hope enlarged with success, and in the end £100,000 was fixed as the figure to be attained. It was decided that this should be accomplished before Jubilee Day, the 20th of June, 1897.

Though begun so auspiciously, it was no easy task to raise in contributions from all classes so large a sum.



THE ROYAL VICTORIA INFIRMARY AT NEWCASTLE-UPON-TYNE, 1906.

It needed organisation, tact, and zealous labour. These were all brought to the undertaking by Mr. Lord and a few helpers who stood by him in carrying it out. Local committees were formed in town and country, meetings were attended and addressed by Mr. Lord and a few others, and a special appeal made to the workmen of the northern counties. Their various organisations were brought into co-operation; and when a day or two before the Diamond Jubilee Mr. Lord was able to announce that his fund had been subscribed, the share contributed by the working classes amounted to nearly £20,000.

In the meantime the House Committee had been preparing a scheme for the rebuilding of the Infirmary; and acting on the advice of the architect who was consulted (Mr. Alfred Waterhouse, R.A.), the Building Committee appointed by the Governors made yet another application to the City Council for an enlargement of the present site. The Town Improvement Committee, after careful consideration, intimated that they could not grant the application; and a renewed application failed to alter their views. The final reply was communicated on the 7th of July, 1897.

Matters were in this position when the Committee and Governors of the Royal Infirmary were summoned by advertisement, signed by the Chairman of the House Committee (Ald. W. D. Stephens), "to attend a meeting in the Board Room at ten o'clock on Saturday

*Mr. John
Hall's offer.*

1897. morning, August 28th, to consider a question of supreme importance to the interests of the Institution." The notice bore the date of August 26th, and the haste of their summons, as well as the mysterious fashion of its wording, had prepared the minds of the attending Governors for some startling announcement. The tension of the moment was soon relieved. With a preliminary word of apology for the manner of their being called together, the Chairman read to the Governors the following letter from a well-known firm of solicitors (Messrs. Dees & Thompson), and it was intimated that the client referred to was Mr. John Hall:—

"If the Governors of the Royal Infirmary, instead of rebuilding upon the present site, decide upon the erection of a new Infirmary upon the Leazes, or near to the Recreation Ground on the North Road, and acquire a site there, a client of ours will be prepared, subject to proper provisions and to details to be hereafter arranged, to defray the cost of the new building and of fitting and furnishing it within the limit of £100,000, upon the understanding that the subscriptions to the new Infirmary Building Fund will become available for the General Purposes of the Institution."

Mr. Hall had long been a munificent giver to the public interests and charities of Newcastle, and it was not unknown that he had at one time contemplated some action on a large scale on behalf of the Infirmary. He was known also to be strongly opposed to the rebuilding of the Infirmary on its existing site; and it is probable that the imminence of the rebuilding deter-

mined the moment of Mr. Hall's offer. To the Governors who heard the intimation, the magnificent gift appeared to bring the solution of all their difficulties. For, added to the Queen's Commemoration Fund, it seemed to provide ample means, and also to contain the promise of a favourable settlement of the long-standing question of the site. It was not to be thought that the acceptance of so splendid a liberality would be imperilled by scruples, which it was possible to surmount, as to fulfilling its conditions.

From the date of Mr. John Hall's offer, four years were still to elapse before the building of a new Infirmary could be begun. Causes of delay enough were apparent in already existing difficulties, and in those arising out of the conditions of Mr. Hall's gift. Others, unforeseen, arose as time went on. In the end all were happily cleared away and their sequence need only be stated in rapid outline.

Although Mr. Hall's condition as to site could be carried out only by a procedure involving many steps and much time, it was met with such generous promptitude on the part of the City Council and the Freemen that no unavoidable delay occurred on this account. Choice was made of a site of ten acres on the part of the Leazes between Claremont Place and the Leazes Park. The decision of the Council and Freemen needed confirmation by the ratepayers. A public meeting, followed by a general poll, took place for this

*A site
granted.*

1898.

purpose, and the decision was upheld by a large majority. To enable the Corporation of Newcastle with the consent of the Stewards and Wardens of the Companies in the borough to convey the selected site, the consent of Parliament was necessary; and an Act giving this authority received the Royal assent on the 12th of August, 1898. The actual sealing of the conveyance did not take place till the 17th of May, 1900.

In the meantime, the death of the generous benefactor, Mr. John Hall, occurred. He died in June, 1899; and in his will it was directed that the £100,000 bequeathed for the building of the new Infirmary should not be available for that purpose till the whole of the £100,000 promised to the Queen's Commemoration Fund had been received. The fund at the time was short of completion by the sum of £8,500 and this amount was promptly given by Mr. J. C. Eno, who had already subscribed £1,000. This generous action on the part of Mr. Eno gave especial satisfaction, as he had in former years been an official of the Institution which he now so munificently benefited.

*Causes of
delay.*

Still the unavoidable sources of delay were not expended. The condition imposed by Mr. Hall as to the use to which the Queen's Commemoration Fund should be devoted was not free from ambiguity. The executors of the will on the one hand, and the Committee of the Queen's Commemoration Fund on the other, feeling the necessity of being assured as to their

action, sought the guidance of the Court of Chancery, and the case was heard by the Court on the 16th of March, 1901. The Court directed the payment of Mr. Hall's bequest to the trustees of the Royal Infirmary, and also empowered the trustees to apply the Commemoration Fund to the general purposes of the Infirmary, as stipulated in Mr. Hall's original conditions. This decision disposed of the last obstacles in the way of making a commencement, and in the August following, the Building Committee entered into a contract for the erection of the new Infirmary.

More than a year before this stage was reached, the Foundation Stone had been laid by His Royal Highness the Prince of Wales, the patron of the hospital. So soon as the obtaining of the site was assured, steps were taken by the Governors to ascertain the Queen's pleasure, and it was graciously intimated that Her Majesty would depute the Prince of Wales to represent her on the occasion. The Queen had already commanded that the new Infirmary should be called the "Royal Victoria Infirmary for the Counties of Newcastle-upon-Tyne, Durham and Northumberland." The foundation stone was laid on the 20th of June, 1900, the Prince of Wales being accompanied by their Royal Highnesses the Princess of Wales and the Princess Victoria.

*Laying of
foundation
stone, 20th
June, 1900.*

The Queen, whose happy and prosperous reign the new Infirmary was intended to commemorate, died on

*Death of the
Queen, 22nd
January,
1901.*

the 22nd of January, 1901. By this event the memorial acquired a more intimate and personal character. It became more than a memento of the length and beneficence of her reign; it became a tribute to the virtues of a great Queen and a symbol of the unbounded love and devotion of her people.

1901.

It would be difficult to recall any undertaking of a similar character to the building of the new Infirmary whose history has been so chequered with vicissitudes and surprises; and before the building was commenced another surprise was yet in store. On the eve of the final and satisfactory adjustment of the conditions of Mr. Hall's gift, another instance of princely munificence towards the Infirmary was made public. A letter was received by the Vice-Chairman of the Committee (Sir George Hare Philipson) from Mr. Watson-Armstrong (now Lord Armstrong) intimating the gift from Mrs. Watson-Armstrong and himself of £100,000 to the Infirmary, to perpetuate the memory of the late Lord Armstrong. The text of Mr. Watson Armstrong's letter fully explained the feelings which prompted the gift and was as follows:—

*Another
munificent
gift.*

Hotel Prince de Galles, Cannes,
March 10, 1901.

MY DEAR SIR GEORGE,

Mrs. Watson-Armstrong and I are desirous of raising in Newcastle, the city of his birth, round which during a long life his chief affections centred, a memorial worthy of Lord Armstrong. There was no institution in which he took a keener interest than in the Royal Infirmary; and the troubles that have so long delayed the

commencement of the Queen Victoria Infirmary were a source of keen distress to him.

We also feel that had Lord Armstrong lived long enough to know the great loss the nation has sustained, he would have been one of the first to urge the speedy commencement of the Infirmary, named after our late revered Sovereign. I have therefore determined to hand over to your Committee the sum of one hundred thousand pounds to be used either for the building or endowment of the Infirmary as may seem to them best to meet existing circumstances and to enable the work to be pushed on without delay.

I make no conditions ; but simply reserve the right of spreading the payment of this sum over the next three years.

Believe me,

Yours very truly,

W. A. WATSON-ARMSTRONG.

It is difficult to say whether the gift, or the manner of the giving, elicited most the gratitude and admiration of the Governors and the public. Coming as it did, when the troubles that had so long delayed the undertaking were by no means all cleared away, the munificence of the gift was enhanced by the kindly consideration which imposed no conditions upon its acceptance.

The Governors of the Royal Infirmary now found themselves in a position which probably has no parallel in the history of English hospitals. After years of almost despairing endeavour to find a way out of their difficulties, these had been replaced, as if through some magical influence, by an unstinted fulfilment of their hopes. Through the goodwill of the City Council and the Freemen a site, which satisfied all requirements of space and salubrity, had been provided without cost.

The fund for building, begun in happy association with an event which touched the emotion and quickened the liberality of the public, had been completed by the large-hearted munificence of two princely donors. Nothing stood in the way of an immediate commencement or of a completion of the undertaking worthy of the object and the benevolent generosity of its promoters.

1901. On the 1st of August a contract was entered into by the Building Committee for the erection of the new hospital at a cost of £203,527. This did not include the building of the enclosure walls and porters' lodge, nor the amount of the engineering contract.*

When the building was commenced no circumstances likely to delay its progress were anticipated. But these have not failed to present themselves. Something of the same crooked fortune which attended the early stages of the project has hindered its completion. The causes of delay which have led to the unlooked-for period of five years being occupied by the building have been those which are apt to beset such enterprises and their recital would be now tedious and unprofitable. The parallel which was suggested may, however, be pursued—as the efforts of the projectors of the new Infirmary to obtain a site and funds for its erection were at last crowned with success, so the now completed

* The architects who had been selected were Messrs. W. L. Newcombe and Percy Adams ; the contractor, Mr. Alexander Pringle.

building may be pointed to as the equally successful crowning of the patient labour that has been devoted to its construction.

The Royal Victoria Infirmary has been built on the pavilion system and its arrangement is simple. A long corridor traverses the building, and has at its upper end, connected by a conservatory, the Nurses' Home, and at its lower end the out-patient block. The Nurses' Home, the need of which was so acutely felt, was begun first and its construction pushed forward, so that it has been opened and occupied for the past twelve months. It contains accommodation for 100 nurses, who have each a separate bedroom, and there is a large recreation room, and a sitting-room for sisters and another for nurses. The hospital proper is of two storeys and consists of ten pavilions or twenty wards. These wards pass off right and left from the main corridor, with which they are connected by secondary corridors. Each ward system is a complete unit for ward administration, having patients' day room, kitchen, sister's room, scullery and room for patients' clothes, with one or two single or double-bedded wards, all communicating with a short corridor. The walls of the wards have a tiled dado, the upper portion being formed of cement coated with duresco, so that the surface is absolutely non-absorbing, and all corners are rounded to avoid the settling of dust and to facilitate cleansing. The Children's department, at the lower portion of the site, consists of four

wards and two day rooms, and the walls of all these apartments are made bright with picture panels, which have been presented to the hospital by different donors.*

The administrative block is in the centre of the hospital and comprises, besides the entrance hall, a very handsome Library, Board-room, staff consulting room, general offices, and lodging rooms for the resident medical staff. The kitchen is placed at the top of the administrative block, and is conveniently situated for distribution, by lifts and other arrangements, to the various parts of the hospital. There are five operating theatres and rooms, and these have all been carefully planned, lighted and fitted up, on the most modern principle, for their special use.

The hospital chapel, which will be dedicated to St. Luke, is Byzantine in style. It has been made the object of much interest, and gifts of great value have been bestowed for its fitting-up and embellishment. The stained glass filling the windows, the pulpit and lectern, the organ, the altar and the reredos, as well as the service books, are all gifts and are mementoes of former friends and administrators of the charity.† The

* The donors of the picture panels in the children's wards are : (1) the Misses Stephenson, (2) Mrs. Albert Lord and her friends, (3) the Honorary Physicians and Surgeons, (4) the Workmen Governors.

† The gifts to the chapel are as follow :—

1. The altar and reredos, given by the family of the late W. B. Wilkinson, for many years a member of the House Committee.
2. The pulpit and lectern and a stained glass window, in memory





The Royal Victoria Infirmary—Administrative Buildings.



The Royal Victoria Infirmary—Out-Patients' Buildings.



walls of the chapel are lined with faience work and the arches and dome are ornamented with mosaic. There is seating for 120 persons.

The general and special out-patient department has been planned with great skill and care. It consists of a large central waiting hall, around which consulting and examination rooms are arranged. A corridor surrounds these rooms as an outer rim, by which patients pass to the dispensary department without returning into the hall. A special out-patient department for skin diseases and an extensive and elaborately fitted department for electrical treatment within the hospital have been provided.

There will be accommodation in the wards for 400 patients. A hospital of this magnitude, with all its necessary adjuncts built upon the costly and exacting scale of present-day hospital requirements, cannot be erected save at great expenditure of money. It is calculated that, when fully furnished and equipped, the Royal Victoria Infirmary will have cost the sum of £300,000.

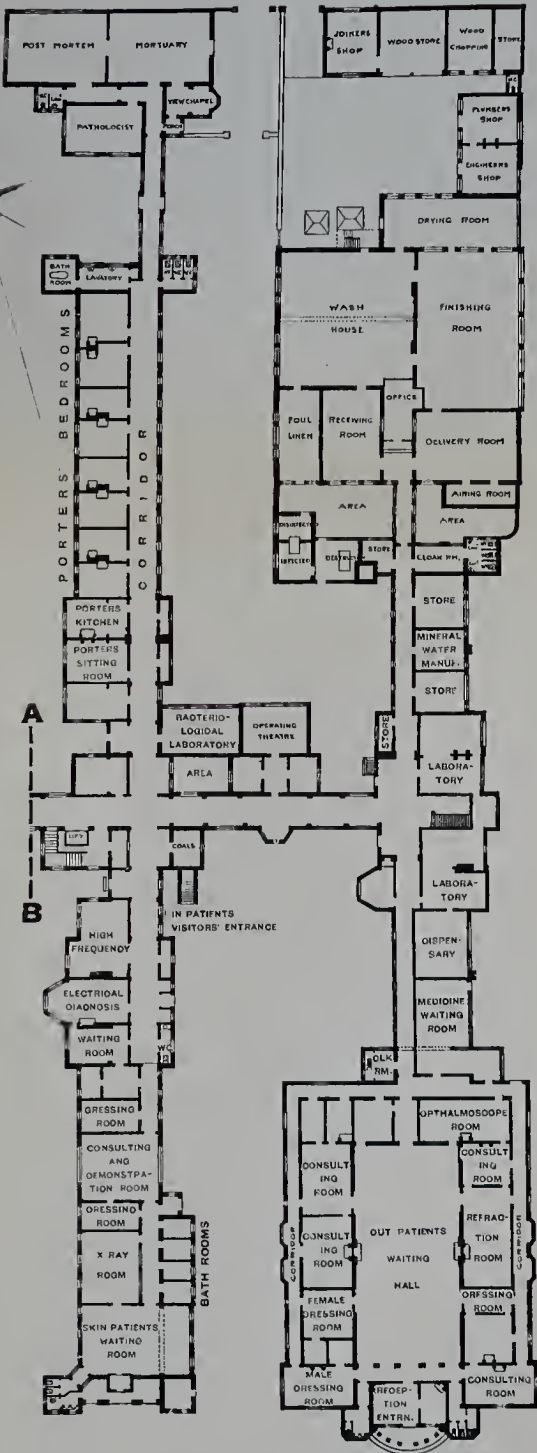
of the late John George Fenwick, for many years a member of the House Committee, and of his wife, given by the members of their family.

3. The organ, given by Miss Beatrice Wilkinson.
4. The east window, given in memory of John Hall by his nephew, C. O. Hall.
5. The service books, given by Mary Armstrong in fulfilment of the wish of her late mother, Janet Armstrong.

The new Infirmary has been built with a double purpose—as a tribute to the memory of a revered Queen,* and to provide adequate hospital accommodation for the sick and lame poor of the Northern Counties. It stands in wonderful contrast to the old Infirmary which it succeeds. But the contrast is as great between the modern Newcastle and the eighteenth century town, which so readily used some of its growing wealth to found the Infirmary. And there are some points in common. Again the Governors are indebted to the corporate bounty of Newcastle for a site outside the busy thoroughfares; again the new building has been raised to relieve “the straitness of the present house”;† and lastly, the new Infirmary may challenge a favourable judgment, in the words which were used of its predecessor, that it is “adequate to the design in its full extent, every way commodious for the reception and the more speedy recovery of the patients.”

* To further associate the new Infirmary with her memory, a marble statue of Queen Victoria, by Frampton, the gift of Sir Riley Lord, will be placed in the garden opposite the main entrance.

† This referred to the temporary Infirmary in Gallowgate. *First Infirmary Report, 1751-1752.*



NEWCASTLE-UPON-TYNE.
 ROYAL VICTORIA INFIRMARY.
 1906.

PLAN OF LOWER GROUND FLOOR.

SCALE OF FEET.





APPENDICES.

APPENDIX A.

LIST OF THE ORIGINAL SUBSCRIBERS TOWARDS BUILDING
THE INFIRMARY.

To preserve as far as possible the remembrance of the benevolence, piety, and charity of the first institutors of the Infirmary, it may not be improper to add a list of their names and the benefactions of £10 and upwards, extracted from the first edition of the *Statutes and Rules*, published in December, 1751.

A list of the benefactors to the Infirmary from the opening of the subscription, February 9th to December, 1751:—

	£	s.	d.
The Right Rev. Dr. Butler, Lord Bishop of Durham, £100 for five years, and £50 to the building.			
The Right Hon. Earl of Northumberland	200	0	0
Sir Walter Blackett, Bart.	200	0	0
The Right Rev. Lord Bishop of Gloucester	100	0	0
The Right Hon. Lady Windsor	100	0	0
The Right Hon. Lord Ravensworth	100	0	0
Lord Crewe's Trustees	100	0	0
Mrs. Tomlinson, relict of the late Rev. Dr. Tomlinson of Whickham	100	0	0
Messrs. Davidsons and Milbank	100	0	0
The Quarterly Meeting of the people called Quakers, Durham	70	0	0
John Steavenson, Esq.	52	10	0
Launcelot Allgood, Esq.	50	0	0
Matthew Ridley, Esq.	50	0	0
Matthew White, Esq.	50	0	0

	£	s.	d.
Dr. Rotheram, of Hexham, in part of the produce of a course of experimental philosophy by him given for the benefit of this charity	42	0	0
Matthew Bell, Esq.	31	10	0
Thomas Davison, Esq.	31	10	0
John Davidson, Esq.	30	0	0
William Ord, Esq.	21	0	0
Mr. Thomas Crozier, of London	21	0	0
Mrs. Martha White	21	0	0
B.K., a person unknown by M. Bell, Esq.	20	0	0
Mrs. Whitfield	20	0	0
Richard Wilkinson, Esq., Durham	20	0	0
Mrs. Grace Ord	15	15	0
The Rev. Dr. Bland	10	10	0
Percival Clennell, Esq.	10	10	0
Miss Clennell	10	10	0
Richard Grieve, Esq., Alnwick	10	10	0
Mr. S. Handcock	10	10	0
Mrs. Liddell, of Newton	10	10	0
Mr. Daniel Hodgson	10	10	0
Sir Hugh Lawson, Bart.	10	10	0
The Rev. Dr. Eden	10	10	0
John Airey, Esq.	10	10	0
Henry Thomas Carr, Esq.	10	10	0
Christ. Fawcett, Esq.	10	10	0
John Williams, Esq.	10	10	0

APPENDIX B.

ANNIVERSARY MEETING.

The proceedings at the Anniversary Meeting, which was held in the Race Week or Midsummer Assize Week, are described in the following extract from an advertisement in the *Newcastle Journal* from Saturday, July 12th, to Saturday, July 19th, 1766:—

The Governors, Contributors, and all well wishers to this Charitable Undertaking are desired to meet at the Exchange exactly at

Ten O'clock, in order to proceed from thence to St. Nicholas' Church, and after Divine Service to Mr. Parker's, the "Turk's Head," where a Dinner will be provided.

Tickets for the Dinner, at 6s., to be had of the Stewards and at Mr. Parker's and the Infirmary.

N.B. There will be a collection at Church only.

The following account of the meeting appeared in the *Journal*, July 26th to August 2nd, 1766:—

On Saturday was held here the Anniversary Meeting of the Governors of the Infirmary, who met at the Exchange and went to St. Nicholas' Church, where a sermon was preached by the Rev. Dr. Douglas, Prebend of Durham. The collection at Church amounted to £19 17s. 1½d. After which they had an elegant entertainment at Mr. Parker's Long Room.

In reference to the Anniversary Feast, which was held in the long ward of the New Infirmary previous to its opening, these entries appear in the minute book:—

May 28, 1753. Meeting of the Stewards at Forth House. Anniversary Feast to be kept at the New Infirmary. Agreed with Mr. Lyonel Sadler for a dinner to be served up in the Great Ward of the New Infirmary on Wednesday, 27 June, with Bread, Beer and Porter for 100 persons at 2s. 6d. 6 doz. Claret to be ordered. Bell-ringers to have 10s. Mr. Mayor's and Mr. Carr's butlers to attend.

For the first few years the sermon preached at the Anniversary Meetings was printed. April 5th, 1759, it was resolved, "Anniversary Meeting to be held on Wednesday in Race Week. The rector of Rothbury to preach the sermon. No sermon for the future to be printed."

At a Quarterly Court, 3rd January, 1805, the attention of the Governors was drawn to

Mr. Lofthouse's bill for wine at the (previous) Anniversary Dinner (84 bottles for 73 people). A further charge for wine for servants

(£1 7s. 0d.). Mr. Lofthouse to be told that in former similar dinners the quantity of wine seldom exceeded a pint for each person.

It was agreed that in case the dinner was held at Mr. Lofthouse's to appoint a person to take account of the wine.

For many years the collection at church amounted to from £30 to £40. On one occasion (1836), when the Bishop of Durham preached, it was £79 7s. The balance from the Anniversary Dinner varied very much. Usually it was from £20 to £30, sometimes much less. The dinner lost its popularity after about 1840. In 1844 it was resolved to discontinue it and to substitute a cold collation at 10s. 6d. This was not more successful, realising a balance of only £5 14s. 6d., and it was not repeated.

APPENDIX C.

From the report by Dr. Clark on the "Result of an Inquiry into the State of various Infirmarys, with a View to the Improvement of the Infirmary at Newcastle":—

EXTRACT DESCRIPTIVE OF THE INFIRMARY AT NEWCASTLE.

The INFIRMARY at NEWCASTLE was erected in the year 1751. It stands in an open, dry, elevated situation, at a convenient distance from the town and from the River Tyne. The out-grounds for the patients, though small, are convenient, and command a pleasant prospect of the adjoining country. It consists of a front building and one wing, containing, in all, 7 wards. The largest ward is 76 feet by 20, and 12 feet high, with 23 beds. The next in size is 64 feet by 20, and 13 feet high, with 20 beds. Each of these wards appears to have been originally intended to have been divided, having two fire places in each, one of which is shut up. Two wards, 33 feet by 20, and 12 feet high, containing 11 beds each: One contains 10 beds, 29 feet by 20, and 12 feet high: Two wards, containing 7 beds each; one of which is 21 feet by 20,

and 9 feet high; the other, 20 feet by 15 and 13 feet high. The windows in the large wards are 7 feet 7 inches by 3 feet 10 inches; and in the attic storey, 3 feet 9 inches by 3 feet 7½ inches.

Besides these wards, there are a few small apartments which might be conveniently occupied by particular patients, which at present are used as store rooms, &c. The ground floor, in the front, contains the Chapel, Governors' Hall, a small Consulting Room for Physicians and Surgeons, together with an apartment 20 feet by 18½, and 13 feet high, serving the double purpose of a Surgery and Waiting-room for all the patients.—Great inattention has been shewn, in the original construction of the building, to the convenience of the Medical and Surgical Gentlemen. The Surgeons must either examine their patients amidst a crowd of other patients, whatever be their complaints, or remove them to the shop, a place ill calculated for such purpose; and when the whole of the Physicians belonging to the Establishment happen to meet on the day of prescribing for the out-patients, the inconvenience and confusion attending the separate examination of four different patients in the same room have been often felt and regretted.—There is a passage the whole length of the front, with an entrance-door at one end, and a large window at the other, on the ground floor, and corresponding galleries in the stories above; but the galleries in the wing not intersecting those in the front, being closed up at both ends, and the water-closets being improperly placed, prevent a circulation of pure air in this part of the house.

The bedsteads are of wood, and badly situated, being placed with their sides against the wall. Two of the wards are too large, and all of them too much crowded. From a combination of circumstances of this nature, notwithstanding the favourable situation, the air of the Infirmary, in the morning particularly, is impure.

The proportion of deaths, in all admitted for these last two years, appears to be one in 16. In fractures, compound and simple, for the same period, 59 have been admitted, nine of whom died; and in fractures of the skull, 6 have been admitted, 5 of whom died.

PROPOSED INTERNAL IMPROVEMENT AND EXTENSION OF THE NEWCASTLE INFIRMARY.

As the crowding together of patients, and inattention to cleanliness and ventilation, are the chief causes which affect the salubrity of air in Hospitals, I shall state, as briefly as possible, a few remarks on these heads, as referable to the Newcastle Infirmary.

Contamination of Air, arising chiefly from crowding, indiscriminately, too many sick people together.—I would propose that the long wards be divided, and the number of patients considerably reduced in every department in the House. The longest ward, at present containing 23 beds, when divided into two, ought not to lodge more than nine patients each; and the ward containing 20 beds, having undergone a similar alteration, should not be occupied by more than 16 people. The wards which have 11 and 10 beds each, should be reduced to 7; and those containing 7 beds at present, ought only to have 4. A small room should likewise be set apart, near the theatre, as a dark ward, for the reception of patients after the operation of couching. It would also add much to the comforts and ventilation of the House, if a small room or two, in each story, could be fitted up for the purpose of dining-rooms for the patients.

By limiting the number to 63 instead of 89, and from different-sized wards affording a completer separation of diseases, the purity of the air would be proportionately increased, and, by more speedy recoveries, the succession of patients unquestionably greater.

With respect to *Cleanliness*, little more need be said in this place (being already taken notice of in the New Code), than that the bedsteads should be made of iron, to turn up in the day-time, with the heads against the walls, and the bedclothes removed; and where fixed water closets cannot conveniently be erected, Binns's portable water closets, answering the purpose very completely, ought to be adopted.

Ventilation.—In order to obtain a succession of fresh air in the apartments of the sick, part of the bottom panes of the upper sashes of the windows should be cut away, and a frame of wood or glass placed across, resting upon the top of the under sash, and fastened to it with hinges, so as to form any angle at pleasure, and prevent the current of air falling upon the patients. Apertures in the walls should likewise be made, corresponding with the windows in the galleries, and the window above the entrance door to turn on a swivel, forming, by this means, a complete ventilation. Although adequate supplies of fresh air are essential to its purity, yet the temperature must also be regarded, with a view to salubrity. To effect this purpose, stoves might be placed in the galleries in winter, or heated air conveyed into them by means of earthen tubes from below, and hence into the wards by the apertures in the walls, as in the Royal Hospital at Woolwich.

The above-mentioned alterations seem indispensably necessary in the present building; but should the Governors see the necessity of erecting an additional wing, the following are the considerations principally to be attended to. That the Physicians and Surgeons may fulfil the duties of their stations with comfort to themselves and advantage to their patients, it is necessary to provide them with proper accommodations. The inconveniences arising from this neglect will readily be conceived, from what has already been said. There should be 8 wards, each 17 feet 9 inches by 11 feet, and 14 feet high, containing 2 beds each, 1 for a convalescent and another patient; with one or two small rooms annexed, for the accommodation of the nurses. Each of these wards to have one window, placed opposite the door which opens into the galleries; in which there must be a window, facing the door of each ward. In the construction of the water closets, particular attention must be paid, to place them so as not to obstruct the ventilation.—By pursuing this plan, the fullest scope would be given for completing the improvements in Hospital practice, the utility of which is so admirably illustrated in the account of the Royal Hospital at Woolwich, and in the Northampton and Leeds Infirmaries.—I cannot conceive that any scheme for accomplishing these ends, and extending the benefits of this noble Institution, will be treated with neglect by its present supporters, or fail in being espoused by the public in general.

Having already exceeded the limits at first prescribed, I shall shortly sum up under a few distinct heads, the result of my reflections and inquiries into the state of Hospitals and Infirmaries, which may be assumed as axioms for directing their improvements.

1. That the success after compound fractures, amputations, and fractures of the skull, may in some measure be a criterion for ascertaining the salubrity of the air, and the nature of the accommodations for the sick, in HOSPITALS and INFIRMARIES; and that, whenever the mortality is great in *these*, in internal diseases it will be proportionably fatal. By the present defective Reports of Infirmaries, the mortality in internal diseases, viz., those that are *medical*, cannot be truly ascertained, because the frequently fatal termination of the diseases of many of those dismissed, relieved, or made out patients, is not known, and unnoticed in the Reports.

2. The recovery of patients labouring under compound fractures, and accidents of the skull, requiring operation, is rendered

doubtful, by their *previous residence* in crowded and ill-ventilated wards; and their being returned into the same department *after* operation, affords still less chance of a favourable termination.

3. That the treatment of diseases has been extremely successful, wherever a complete separation of patients, and an arrangement according to diseases in suitable wards, has been adopted.

My exertions on this occasion will, I hope, be attributed to no other motive than an ardent zeal to place this upon a footing with the most approved Institutions, for relieving, in the most effectual manner, the distresses of the afflicted, and promoting the improvement of the Science of Medicine.

APPENDIX D.

The following entries of donations and benefactions are of interest. The first entry refers to a "State Lottery," which from the time of Elizabeth down to the year 1826 was a frequently adopted means of raising money for the Government. The annual revenue from this source amounted to from £250,000 to £300,000 (Chambers' *Book of Days*, vol. ii., p. 465).

The entries of fines handed over to the Infirmary are very frequent throughout the first half of the nineteenth century. Offences against the Coal-turn Act seem to have been quite a source of income to the Infirmary.

	£	s.	d.
1703-4. The gentleman who obtained the £10,000 prize in the last lottery, by Mr. A. Hopper	30	0	0
1815-6. Fines from five boys for breaking gardens ...	2	10	0
From the officers of the late Associated Volun- teer Infantry	105	0	0
1816-7. By a dinner party at Mr. Teasdale's on the Anniversary of the battle of Waterloo ...	3	3	0
1817-8. Mr. R. Marshall, being a fine inflicted on the master of a ship for obtaining a turn at a coal office under a false representation	15	0	0

	£	s.	d.
1818-9. The produce of a lecture on the application of gas to the purpose of light	24	15	0
1819-20. A penalty recovered by Mr. Rowntree from a farmer who had delivered short measure in 10 bolls of wheat	1	1	0
1819-20. Half of a penalty received by the commissioners under the Coal-turn Act	8	11	6
1823-4. Moiety of a fine transmitted by Mr. George Fothergill, awarded to him as informant against the master of a steam packet for throwing ashes into the River Tyne	1	0	0
1839. B. O. Mitford, esq., a proportion of a stake won by greyhounds at Cresswell	7	0	0
1840-1. Proceeds of a Ball held in honour of the birth of the Princess Royal	61	7	6
J. H. Hinde, esq., it not being convenient for him to attend the ball	5	0	0
1840-1. An informant's moiety of a penalty inflicted on publican for having regimentals in his possession	2	4	3
Informant's moiety of a penalty imposed on a carrier for misconduct on the Ponteland road	1	5	0

(Extracts from Minute Book.)

- 27 Nov., 1806.—Letter from Lord Collingwood enclosing donation of £50.
- 5 March, 1807.—Secretary reports that Mr. MacCreedy had brought £79 2s., the full receipts of the House on Friday, Feb. 27.
- 4 Jan., 1810.—Mrs. Kemble offers to perform in a play for the benefit of the Infirmary.

In aid of the fund for building the Dobson Wing an amateur concert was given in the Assembly Rooms. The following entry in the Minute Book refers to this event. The names which were engraved on the picture are those of the instrumentalists and singers. The portraits of the former are indicated by numbers corresponding to the numbers in the list.

March 2, 1854. That in compliment to the ladies who took part in the amateur concert in aid of the Building Fund on the 25th of January, 1853, by which the Infirmary was benefited to the amount of £270, a coloured copy of the print of the concert, lately published by R. H. Brandling, Esq., be purchased, appropriately framed and hung up in the Governors' Hall.

- | | |
|--------------------------|---------------------|
| 1. Hon. Lady Williamson. | 10. Miss Walsham. |
| 2. Miss Anderson. | 11. Miss Brandling. |
| 3. Miss L. Brandling. | 12. Miss Bilton. |
| 4. Miss Bainbridge. | 13. Mr. Stephens. |
| 5. Miss Dalyell. | 14. Mr. Herrmann. |
| 6. Miss Dobson. | 15. Mr. Bell. |
| 7. Miss Wilkinson. | 16. Miss Burgoyne. |
| 8. Mrs. Railstone. | 17. Mrs. Wallace. |
| 9. Signor Pinsuti. | 18. Mrs. Lamb. |

- | | |
|---------------------|----------------------|
| Mr. Allison. | Hon. & Rev. F. Grey. |
| Miss A. Anderson. | Miss Griffiths. |
| Mr. J. Anderson. | Mr. E. Headlam. |
| Mrs. Andrews. | Miss Heath. |
| Mr. Belough. | Mr. Herskind. |
| Misses Bilton. | Miss Hewitson. |
| Mr. H. Brandling. | Mr. Ivers. |
| Miss Browne. | Mr. Jastrau. |
| Mr. Burgoyne. | Mr. Lange. |
| Miss Carr. | Mdlle. Lange. |
| Mr. Challoner. | Mr. Meier. |
| Mr. Clarke. | Mr. Newcombe. |
| Miss Cole. | Mr. Niemeitz. |
| Miss E. Collinson. | Mr. W. Niemeitz. |
| Miss Coxe. | Mr. Peck. |
| Rev. Mr. Dykes. | Mr. Richmond. |
| Mr. A. Eichholtz. | Mr. Robinson. |
| Mr. R. Eichholtz. | Mr. Stathan. |
| Rev. Mr. Errington. | Miss Wilkinson. |
| Miss Fife. | Mr. Willings. |
| Rev. Mr. Greenwell. | |
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Amateur Concert in aid of the Newcastle Infirmary, January 27th, 1853.
(See Appendix D.)

From a Coloured Print.



APPENDIX E.

Letters from Sir W. G. Armstrong referring to the building and opening of a new operating theatre:—

ATHENÆUM CLUB,
LONDON.

5th April, 1870.

To the House Committee, Newcastle Infirmary.

GENTLEMEN,

As the Infirmary can ill-afford to lose income by the appropriation to building purposes of any part of the invested fund, I have decided to take upon myself the outlay required to carry out the buildings and alterations recommended by the Building Committee and estimated by Mr. Oliver to cost £2,500.

It must be understood that my offer is limited to that sum and that no deviation be made from the plans already approved without my concurrence.

I cannot return to Newcastle in time for the annual meeting, and I therefore here express a hope that a vigorous effort will be made to raise the income to an equality with the increased expenditure which the recent improvements demanded by the public have rendered indispensable.

I am, gentlemen,
Yours faithfully,
W. G. ARMSTRONG.

CRAGSIDE,
MORPETH.

27th May, 1872.

MY DEAR SIR,

I enclose cheque for £700 in full of my donation of £2,700 to the Infirmary.

I do not see much good to be got from a formal opening of the new operating room. At all events, my presence must be excused, as I have no taste for the kind of speeches that are made on such occasions.

Yours very truly,
W. G. ARMSTRONG.

R. Y. Green, Esq.

APPENDIX F.
TABLES OF DIET, 1801.

I.—COMMON DIET.

SUNDAY.

- Breakfast:* From a pint to a pint and a half of milk pottage,
or a pint of hasty pudding with milk.
Dinner: A pint of broth, with 8 oz. of boiled mutton, beef, or
veal, and vegetables.
Supper: A pint of broth and vegetables.

MONDAY.

- Breakfast:* From a pint to a pint and a half of rice gruel or rice
milk.
Dinner: 12 oz. of rice or bread pudding.
Supper: A pint of milk pottage, or hasty pudding with milk.

TUESDAY.

- Breakfast:* From a pint to a pint and a half of milk pottage,
or a pint of hasty pudding with milk.
Dinner: A pint of broth, with 8 oz. of boiled mutton, beef, or
veal, and vegetables.
Supper: A pint of broth with vegetables.

WEDNESDAY.

- Breakfast:* From a pint to a pint and a half of rice gruel or rice
milk.
Dinner: 4 oz. of boiled mutton or beef, with 8 oz. of flour pudding.
Supper: A pint of broth.

THURSDAY.

- Breakfast:* A pint of panado.
Dinner: 6 oz. of baked mutton or veal, with boiled potatoes or
other vegetables.
Supper: A pint of water gruel or milk pottage.

FRIDAY.

- Breakfast:* From a pint to a pint and a half of milk pottage.
Dinner: 12 oz. of flour or rice pudding.
Supper: A pint of milk pottage, or hasty pudding with milk.

SATURDAY.

Breakfast: From a pint to a pint and a half of milk pottage.

Dinner: 4 oz. of boiled mutton or beef, with a pint of broth.

Supper: A pint of milk pottage or gruel.

A pint and a half of beer daily.

For every gallon of broth, three pounds of mutton or veal, or two pounds of lean beef, to be put in above the common allowance of meat.

II.—REDUCED DIET.

SUNDAY.

Breakfast: A pint of water gruel, or milk pottage.

Dinner: A pint of broth, with 2 oz. of mutton or veal.

Supper: A pint of water gruel, or milk pottage.

MONDAY.

Breakfast: A pint of gruel, or panado.

Dinner: A pint of rice milk, or 8 oz. of rice pudding.

Supper: A pint of water gruel with sugar.

TUESDAY.

Breakfast: A pint of milk pottage.

Dinner: A pint of broth, with roots.

Supper: A pint of milk pottage, or gruel.

WEDNESDAY.

Breakfast: A pint of milk pottage, or gruel.

Dinner: 8 oz. of bread or potato pudding.

Supper: A pint of gruel, or panado.

THURSDAY.

Breakfast: A pint of gruel, or panado.

Dinner: 2 oz. of mutton or veal, with 6 oz. of potatoes.

Supper: A pint of milk pottage, or water gruel.

FRIDAY.

Breakfast: A pint of milk pottage, panado or gruel

Dinner: 8 oz. of potato or bread pudding.

Supper: A pint of milk pottage, or panado.

SATURDAY.

Breakfast: A pint of rice milk.

Dinner: A pint of broth, with 4 oz. of potatoes.

Supper: A pint of water gruel, or milk pottage.

A pint of beer daily.

Each patient on common and reduced diet, is allowed, per day,
a loaf of bread, weighing 12 oz.

III.—MILK DIET.

SUNDAY.

Breakfast: A pint of milk, milk pottage, or gruel.

Dinner: A pint of rice milk, or hasty pudding.

Supper: A pint of milk pottage, or water gruel.

MONDAY.

Breakfast: A pint of milk, milk pottage, or gruel.

Dinner: 8 oz. of rice or bread pudding.

Supper: A pint of milk pottage.

TUESDAY.

Breakfast: A pint of milk, milk pottage, or gruel.

Dinner: A pint of rice milk.

Supper: A pint of boiled milk.

WEDNESDAY.

Breakfast: A pint of milk, milk pottage, or gruel.

Dinner: 8 oz. of bread pudding, boiled or baked.

Supper: A pint of boiled milk.

THURSDAY.

Breakfast: A pint of milk, milk pottage, or gruel.

Dinner: A pint of rice milk, or boiled milk.

Supper: A pint of water gruel, or milk pottage.

FRIDAY.

Breakfast: A pint of milk, milk pottage, or gruel.

Dinner: 8 oz. of rice or bread pudding.

Supper: A pint of milk pottage.

SATURDAY.

Breakfast: A pint of milk, milk pottage, or gruel.

Dinner: A pint of rice milk.

Supper: A pint of boiled milk.

Bread, the same as in common and reduced diet.

Drink milk and water, barley water, and rice gruel.

IV.—LOW DIET.

Patients in a state of fever, and after accidents and operations of consequence, generally require *low* diet, or a cool temperate regimen: water gruel or tea therefore will be proper for breakfast; rice gruel, sago, and the like, for dinner, and supper; small beer, when the patients long for it, with the permission of the physician or surgeon. Six ounces of bread per day, will be sufficient for patients on low diet. Two ounces of sugar.

N.B. The physicians and surgeons, according to the state of the respective diseases of their several patients, have the discretionary power of making variations in any of the above tables of diet, of allowing a more full diet, and of prescribing wine and other liquors, &c., when they judge them necessary.—(See rules 33 and 115.)

PATIENTS' DIET.

(Extracts from *Minute Book*.)

- 6 July, 1815.—The opinion of the physicians and surgeons was asked as to the use of small beer; reply, that the use of small beer was not generally necessary.
- 4 October, 1827.—That such of the patients as choose to have tea may be allowed to have it at their own expense as approved by the physicians and surgeons.
- 4 February, 1847.—Patients to have roast meat three times a week instead of boiled meat every day.

NURSES' DIET, 1846.

Monday: Cold meat, rice pudding, potatoes or greens.

Tuesday: Boiled mutton, potatoes or turnips.

Wednesday: Roast mutton, Yorkshire pudding, potatoes or greens.

Thursday: Boiled beef, currant pudding, potatoes.

Friday: Fish, meat, potatoes or greens.

Saturday: Beef or mutton pie, potatoes.

Sunday: Roast beef, Yorkshire pudding, potatoes or greens.

Roast veal, two geese when in season and fruit pies as usual.

When fish is dear, meat. For each nurse 2 ozs. of tea per week as heretofore with the addition of 2 ozs. of coffee in the berry and a small coffee mill to be fixed on each flat for the common grinding of the coffee. Half a pound of fresh butter per week for each nurse and half a pound of sugar.

APPENDIX G.

LIST OF SPECIAL COMMITTEE AND HOUSE COMMITTEE, 1887.

At the Quarterly Court of Governors, held at the Infirmary, on Thursday, November 4th, 1887, Lord Ravensworth in the Chair, it was resolved, on the motion of the Rev. Dr. Bruce, seconded by the Mayor, B. C. Browne, Esq. :—

“That a Special Committee of the Governors be appointed to confer with the House Committee as to the past management of the Infirmary, and the best mode of extricating it from its present financial position, and to report to a Special Court of the Governors what they recommend should be done under the circumstances.”

The following gentlemen were appointed the Committee :—

The Earl of Ravensworth.
Chairman.

The Mayor of Newcastle.

Thomas Burt, M.P.

Rev. W. Moore Ede.

Alderman T. G. Gibson.

R. G. Hoare.

R. H. Holmes.

J. C. Laird.

Rev. Dr. Rutherford.

Associated with the above were the House Committee for the time being :—

W. B. Wilkinson.	Thomas Young.
J. Collingwood Bruce.	Rev. Canon Lloyd.
N. G. Clayton.	Joseph J. Gurney.
J. G. Fenwick.	R. Knight.
James Richardson.	Ralph Young.
J. Philipson.	Robert Cave.
W. D. Stephens.	Alderman C. H. Young
Rev. R. Leitch.	Ralph Brown.
Hon. & Rev. Canon F. R. Grey.	Thomas Nelson.
Ralph Atkinson.	William Dickinson.
Robert Foster.	Thomas Wilson.
W. H. Holmes.	George Peile.

And Dr. Limont and Mr. Page representing the Medical Board.

APPENDIX H.

THE REGISTER OF THE HONORARY PHYSICIANS, SURGEONS,
ASSISTANT SURGEONS, DENTAL SURGEONS, AND PATHO-
LOGICAL CHEMIST, &c.,

FROM ITS ESTABLISHMENT IN THE YEAR 1751.

PHYSICIANS.

Name.	Elected	Vaca- tion of Office.	Remarks.
Askew, Adam ..	... 1751	1771	Died January 15th, 1773.
Cooper, William	... 1751	1759	Died May 6th, 1759.
Lambert, Cuthbert	... 1751	1772	Died December, 1772.
Johnson, Francis	.. 1751	1771	Died 1771.
Askew, Henry	... 1759	1760	Died March 10th, 1796.
Brown, Charles	... 1760	1787	Died, 1788.
Rotherham, John	... 1771	1786	Died March 18th, 1787.
Hall, John ...	... 1771	1793	Died March 1793.
Wilson, Andrew	... 1772	1775	
Pemberton, Stephen	.. 1775	1800	
Fenwick, J. R.	.. 1786	1791	Died, 1853.
Clark, John ...	... 1787	1804	Died April 19th, 1805.
Moorhouse, Henry	.. 1791	1794	Died February 17th, 1794.
Wood, James ...	... 1793	1813	Died June 30th, 1822.
Ramsay, John...	... 1794	1820	Resigned, appointed Consulting Physi- cian ; died July 8th, 1845.
Stevenson, Robert	.. 1800	1808	Died 1828.
Headlam, Thomas Emer- son	1804	1841	Resigned, appointed Consulting Physi- cian ; died March 18th, 1864.
Glenton, Frederick	.. 1813	1824	Died April 5th, 1824.
Smith, Noel Thomas	.. 1813	1841	Resigned, appointed Consulting Physi- cian ; died July 1st, 1852.
Bulman, Darnell	... 1820	1853	Resigned, appointed Consulting Physi- cian ; died December 24th, 1863.
McWhirter, Thomas Wilson	1824	1836	Died May 25th, 1836.
White, David Blair	... 1836	1868	Died March 15th, 1868.
Cargill, John ...	.. 1841	1853	Resigned, appointed Consulting Physi- cian ; died June 22n, 1878.
Bates, John M. ...	... 1841	1854	Resigned, appointed Consulting Physi- cian ; died 1866.
Charlton, Edward	... 1853	1874	Died May 14th, 1874.
Embleton, Dennis	... 1853	1878	Resigned, appointed Consulting Physi- cian ; died Nov. 12th, 1900.
Humble, Thomas	... 1854	1868	Resigned, appointed Consulting Physi- cian ; died December 8th, 1877.
Philipson, George Hare	1868	1896	Re-appointed 1883 ; appointed Con- sulting Physician, 1896.
Bramwell, Byrom	... 1874	1879	Resigned.
Gibson, Charles	... 1876	1879	Resigned, died April 21st, 1894.
Drummond, David	... 1878		Re-appointed 1893.
Oliver, Thomas	... 1879		Re-appointed, 1894.
Limont, James	... 1885		Re-appointed, 1900.
Murray, George Red- mayne	Red- 1896		

SURGEONS.

Name.	Elected	Vaca- tion of Office.	Remarks.
Hallowell, Samuel ...	1751	1759	
Lambert, Richard ...	1751	1778	
Keenleyside, William ...	1759	1784	
Gibson, Henry ...	1759	1782	Died August, 1782.
Rayne, John ...	1759	1765	
Stodart, Ralph ..	1765	1773	Died April, 1773.
Abbs, Richard Bryan ...	1773	1804	Died February 4th, 1829.
Ingham, William ..	1778	1812	Died November 26th, 1817.
Mewburn, Henry ...	1782	1799	
Keenlyside, Richard ...	1784	1803	Died December, 1803.
Horn, Frederick ...	1799	1808	
Leighton, Thomas ...	1803	1831	Resigned, appointed Consulting Sur- geon; died June 28th, 1848.
Smiles, Edward ..	1804	1832	Died February 13th, 1832.
Horn, Henry Gibson ...	1808	1816	Died September 9th, 1816.
Moore, William ...	1812	1832	Resigned, appointed Consulting Sur- geon.
Forster, John, who in 1820 took the surname of Baird	1816	1844	Died June 15th, 1844.
McIntyre, James ...	1831	1837	Died May 8th, 1837.
Heath, Henry... ..	1832	1854	Resigned, appointed Consulting Sur- geon; died December 6th, 1855.
Greenhow, Thomas	1832	1854	Resigned, appointed Consulting Sur- geon; died October 25th, 1881.
Fife, John	1837	1867	Resigned, appointed Consulting Sur- geon; died January 16th, 1871.
Potter, Henry Glassford	1844	1854	Resigned, appointed Consulting Sur- geon; died June 3rd, 1868.
Heath, George Yeoman	1854	1880	Re-appointed 1869, appointed Consult- ing Surgeon 1880; died Mar. 4th, 1892.
Annandale, Thomas ...	1854	1866	Resigned, appointed Consulting Sur- geon; died November 14th, 1871.
Gibb, Charles John ...	1855	1870	Resigned, appointed Consulting Surgeon
Russell, John	1866	1878	Resigned, died September 29th, 1892.
Arnison, William Chris- topher	1867	1897	Re-appointed, 1882-1887-1892; ap- pointed Consulting Surgeon, 1897; died November 4th, 1899.
Armstrong, Luke ...	1870	1888	Died September 9th, 1888.
Hume, George Hali- burton	1878	1905	Re-appointed, 1893; appointed Con- sulting Surgeon, 1905.
Page, Frederick ...	1880	1900	Re-appointed, 1895; appointed Con- sulting Surgeon, 1900.
Williamson, George Edward	1888	1900	Died June 6th, 1900.
Morison, James Ruther- ford	1897		
Ridley, George Walter ...	1900		
Martin, Albert Morton...	1900		
Angus, Henry Brunton...	1905		

ASSISTANT-PHYSICIANS.			
Name.	Elected	Vaca- tion of Office.	Remarks.
Beattie, Thomas ...	1897		Re-appointed 1904.
Coley, Frederick Collins	1897	1899	Resigned.
Bolam, Robert Alfred ...	1899		
ASSISTANT-SURGEONS.			
Bell, Anthony ...	1869	1870	Elected Surgeon.
Luke, Armstrong ...	1869	1877	Having served seven years, did not seek re-appointment.
Hume, George Haliburton	1869	1878	Elected Surgeon.
Hawthorn, John ...	1869	1877	Having served seven years, did not seek re-appointment; died August 7th, 1897.
Jeaffreson, Christopher Samuel	1870	1874	Resigned; died October 27th, 1899.
Page, Frederick ...	1877	1880	Elected Surgeon.
Dodd, Thomas Anthony	1878	1892	Re-appointed 1885; resigned. Died September 9th, 1903.
Williamson, George Edward	1880	1888	Elected Surgeon.
Morison, James Rutherford	1888	1897	Re-appointed 1895; elected Surgeon 1897.
Black, William Glaholm	1892	1896	Died August 2nd, 1896.
Ridley, George Walter	1894	1900	Elected Surgeon.
Martin, Albert Morton...	1894	1900	Elected Surgeon.
Angus, Henry Brunton	1896	1905	Re-appointed 1903; elected Surgeon, 1905.
Rutherford, John Victor Walton	1897		Re-appointed 1904.
Richardson, William George	1900		
Leech, Joseph William	1900		
Clay, John ...	1905		
OPHTHALMIC SURGEON.			
Wardale, John Dobson	1900		
DENTAL SURGEONS.			
Fothergill, Edward ...	1880	1888	Resigned; appointed Consulting Dental Surgeon.
Markham, Robert Lacey	1888	—	Re-appointed 1895-1903.
PATHOLOGICAL AND ANALYTICAL CHEMIST.			
Bedson, Peter Phillips ...	1888	—	Re-appointed 1895-1901.

PATHOLOGISTS.

Name.	Elected	Vaca- tion of office.	Remarks.
Bramwell, Byrom ...	1876	1879	Resigned.
Drummond, David ...	1879	1895	Resigned.
Beattie, Thomas ...	1895	1904	Re-appointed 1901 ; resigned 1904.
Bolam, Robert Alfred	1904		

APPENDIX J.

LIST OF RESIDENT OFFICERS.

- 1751—Henry Gibson, Apothecary.
 1774 to 1798—Anthony Taylor, Apothecary.
 1799 to 1804—William Jackson, Apothecary.
 1805 to 1816—Frederick Glenton, M.D., House Surgeon and
 Secretary.
 1817 to 1837—James Church, House Surgeon.
 1838 to 1846—Allen Joseph Taylor.
 1847 to 1848—William Henry Benson.
 1849 to 1854—Charles John Gibb.
 1854 to 1869—Andrew Bolton.
 1869—Stanley Peacock.
 1870—Frederick Page.

SENIOR HOUSE SURGEON.

1870. Frederick Page.
 1874. George Thos. Beatson.
 1877. George Edward Williamson.
 1878. Lewis John Hobson.
 1878. James Deighton Dixon.
 1879. James Deighton Dixon.
 1880. Chas. McIvor Goyder
 1882. James Limont.
 1882. James Limont.

JUNIOR HOUSE SURGEON.

- George Rowell.
 George Mickle.
 James Deighton Dixon.
 James Deighton Dixon.
 Chas. McIvor Goyder.
 John Richard Dodd.
 Rowland R. Jones.
 William Glaholm Black.
 E. Hudson.

HOUSE PHYSICIANS.

1883. James Limont.
 1884. James Limont.
 1885. John Waldy.
 1886. John Waldy.

TWO HOUSE SURGEONS.

- { John Waldy.
 { J. Armstrong Hutchinson.
 { John Waldy.
 { G. Walter Ridley.
 { Herbert Bramwell.
 { Frederick P. Maynard.
 { Herbert Bramwell.
 { Frederick P. Maynard.

SENIOR HOUSE PHYSICIAN.

1887. Edward J. Cave.
 1888. Wm. Barjent.
 1889. Wm. Barjent.
 1890. Wm. Barjent.
 1891. W. D. Arnison.
 1892. W. D. Arnison.
 1893. T. Beattie.
 1894. T. Beattie.
 1895. John Clay.
 1896. John Clay.
 1897. { W. H. Rowell.
 { P. Davidson.
 1898. F. S. Walker.
 1899. W. Simpson.
 1900. W. Simpson.
 1901. Jas. Muirhead.
 1902. Jas. Muirhead.
 1903. Alf. Parkin.
 1904. Alf. Parkin.
 1905. W. E. Hume.
 1906. W. E. Hume.

JUNIOR HOUSE PHYSICIAN.

- John E. Nihill.
 T. W. Gibbard.
 T. W. Gibbard.
 T. M. Kimpster.
 Jas. Hindhaugh.
 T. Beattie.
 H. Smurthwaite.
 O. W. Ogden.
 P. Davidson.
 E. J. Brewis.
 T. Woodman.
 F. S. Walker.
 { E. W. Gilroy.
 { W. H. Rowell.
 Jas. Muirhead.
 N. McCall Smith.
 Percy Wigfield.
 { W. R. D. Daglish.
 { J. Graham.
 { Norman Walker.
 { F. Wilson.
 { W. J. Phillips.
 { J. C. Stewart.
 { C. Hope.
 { C. McDowall.
 L. Bulkeley

HOUSE SURGEONS.

1887.

William Barjent.
W. G. Richardson.
W. D. Arnison.
John Wilkinson.

1888.

W. D. Arnison.
G. Arbuthnot Robinson.
Sidney J. Allden.
T. M. Kimpster.

1889.

T. M. Kimpster.
A. E. Cope.
Jas. Arnott.
B. Cox.

1890.

Jas. Hindhaugh.
Raymond H. Shaw.
H. B. Angus.
S. W. Plummer.

1891.

A. J. Dale.
T. Beattie.
J. D. Wardale.
A. M. Martin.

1892.

H. Collinson.
Wm. Martin.
W. H. Bishop.
W. C. Haswell.
Rev. R. Sterling.

1893.

J. Braithwaite.
O. W. Ogden.
D. N. Jackson.
J. Clay.

1894.

W. E. Harker.
G. E. Pearcey.
S. S. Whillis.
J. P. Sparks.

1895.

R. W. Morgan .
E. Fielden.
W. E. Alderson.
E. J. Brewis.

1896.

G. W. Harbottle.
W. H. Rowell.
P. L. Armstrong.
P. Davidson.

1897.

F. S. Walker.
H. H. Gourley.
W. L. W. Walker.
Grant Arnott.

1898.

W. Simpson.
T. G. D. Adams.
J. M. Gover.
H. Fielden.

1899.

G. G. Turner.
E. G. Gofton.
L. F. Hemmans.
G. W. Middlemiss.
L. J. Blandford.
Jas. McConnell.

1900.

M. Jacobs.
R. H. Dix.
F. W. Burn.
R. Alderson.

1901.	1904.
G. E. Froggatt.	W. E. Hume.
W. W. Stainthorpe.	Fred. Stoker.
A. E. Hodge.	H. Christal.
T. S. Coates.	W. Hepplewhite.
T. S. Parkinson.	A. G. Dunn.
J. W. Heslop.	Frank Wilson.
1902.	A. Smith.
R. Younger.	W. J. Phillips.
A. Parkin.	1905.
J. H. Graham.	L. Bulkeley.
J. B. Waters.	H. Reah.
A. H. Proctor.	L. McBean.
W. R. Daghish.	G. E. Lloyd.
F. P. Wigfield.	H. E. Featherstone.
1903.	T. W. Maddison.
J. W. Caton.	S. Robson.
J. C. Stewart.	W. H. Croudace.
T. G. Wilson.	1906.
G. Y. Simpson.	— Willan.
C. W. M. Hope.	E. Tate.
N. B. Walker.	W. Lunn.
B. Spurgin.	H. B. Cunningham.
J. McDowall.	

ACCIDENT HOUSE SURGEON.

1894. R. A. Morris.	1904. W. Hepplewhite.
1895 to 1900. No appointment.	1904. W. E. Hume.
1901. A. Parkin.	1905. H. B. Cunningham.
1902. F. G. Wilson.	1905. H. Reah.
1903. J. W. Caton.	1905. G. E. Lloyd.
1903. A. G. Dunn.	1905. D. Birt.
1904. S. Robson.	1906. W. Lunn.
1904. D. Guns.	1906. A. B. Jones.

